

GMAT

220+ High-Yield Terms & Concepts for the GMAT (Graduate Management Admission Test): the current three-section computer-adaptive exam - Quantitative Reasoning (21 questions/45 min), Verbal Reasoning (23/45), Data Insights (20/45) - scored 60-90 per section with a 205-805 total, plus data sufficiency & all five DI formats, RC & critical reasoning methods, score-choice and retake playbook, and a 30-day study plan



220+ High-Yield Terms & Concepts for the GMAT (Graduate Management Admission Test)

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Category: Graduate Admissions Exam Prep (MBA / Master of Finance / Master of Accountancy)

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How to Use This Guide

The GMAT (Graduate Management Admission Test) is the computer-adaptive admissions exam used by more than 7,700 programs at roughly 2,400 graduate business schools worldwide. The current exam runs in a three-section format -- Quantitative Reasoning, Verbal Reasoning, and Data Insights -- with 64 total questions in 2 hours 15 minutes of testing (plus one optional 10-minute break). Each section is scored 60-90; the total score ranges 205-805 in 10-point increments, and all three sections count toward the total. This guide maps the exam the way it runs. Part 1 covers the rules of the test itself -- format, scoring, registration, retakes, and score validity. Parts 2-6 cover the Quantitative Reasoning content (arithmetic, algebra, word problems, statistics, functions, and sequences). Parts 7-8 cover Verbal Reasoning (reading comprehension and critical reasoning). Parts 9-10 cover Data Insights, including a full deep-dive on data sufficiency. Parts 11-12 are strategy: quant problem-solving moves, pacing, and test-day logistics. Parts 13-16 cover score use, the online exam, mental math and time management, and a 30-day study plan with a final checklist. Work Parts 1-10 in order first -- content before strategy -- then grind Parts 11-16 in the weeks before your exam. Honest positioning: this is an independent study aid, NOT approved, endorsed, or produced by GMAC. The official mba.com site -- its exam structure pages, FAQ, free Official Starter Kit questions, and the GMAT Candidate Handbook equivalents -- is the ground truth for everything administrative.

Part 1: The GMAT Exam & How It Works (16 Concepts)

The rules of the test itself: what the GMAT is, its current format, scoring, registration, retakes, and how schools use the score.

#	Term	Key Facts	Strategy Tip	Example
1	GMAT (Graduate Management Admission Test)	A computer-adaptive standardized test that assesses analytical, quantitative, verbal, and data-literacy skills for admission to graduate management programs -- MBA, Master of Finance, Master of Accountancy, and other business master's degrees.	Know what the score is FOR: admissions decisions, not a license or certification. There is no pass/fail.	An MBA applicant submits a GMAT score with their application; the school weighs it alongside GPA, essays, and work experience.
2	GMAC Ownership & Trademark	The exam is developed and owned by the Graduate Management Admission Council (GMAC), a mission-driven association of leading graduate business schools; GMAT is a registered trademark of GMAC.	Use official prep responsibly -- independent guides like this one are fine, but never imply GMAC endorsement.	Every official mba.com page and score report carries the GMAT trademark and GMAC branding.
3	The Current Three-Section Format	Since the current edition launched in November 2023 (as the "GMAT Focus Edition"; official materials now brand it simply as the GMAT or the GMAT exam), the test has three sections: Quantitative Reasoning, Verbal Reasoning, and Data Insights -- no essay, no separate integrated reasoning section.	If older study materials mention the Analytical Writing Assessment or a 4th section, skip those parts -- they describe the retired exam.	A prep book from 2022 drills argument essays; today's exam has 3 sections, all multiple-choice.
4	What the Current Exam Removed	The current exam dropped the Analytical Writing Assessment (essay), sentence correction questions, and geometry questions that were on the		

Total testing time is 2 hours 15

minutes (135 minutes) for 64 questions: Quantitative Reasoning 21 questions/45 minutes, Verbal Reasoning 23 questions/45 minutes, Data Insights 20 questions/45 minutes.

Memorize the 21-23-20 /

6	GMAT Study Guide	Quantitative Reasoning Section	21 questions, 45 minutes, single question type (problem solving); scored 60-90; tests arithmetic, algebra, and word problems. No calculator is allowed in this section.	Budget just over 2 minutes per Quant question and do the math by hand using the scratch pad.	A problem-solving item asks for a value of x in a two-step equation; you solve, then match the answer choice.
7		Verbal Reasoning Section	23 questions, 45 minutes, scored 60-90; two question types -- reading comprehension and critical reasoning. No sentence correction on the current exam.	Spend your verbal study on passage structure and argument logic -- the two types still tested.	A passage on economics is followed by four main-idea and inference questions; a separate item asks you to weaken an argument.
8		Data Insights Section	20 questions, 45 minutes, scored 60-90; five question formats -- data sufficiency, multi-source reasoning, table analysis, graphics interpretation, and two-part analysis; an on-screen calculator is available in this section only.	Practice each of the five DI formats deliberately -- DI is the section most candidates struggle to finish.	A table-analysis item shows a sortable spreadsheet of sales data; you answer true/false statements by sorting columns.
9		Computer-Adaptive Delivery	The GMAT is a computer-adaptive test (CAT): the computer delivers questions based on your performance, so each candidate's test path differs while the scoring standard stays the same.	Never compare "which questions did you get" with classmates -- your path is yours; the score is what matters.	After correct answers the system presents harder material; after misses it adjusts -- it is estimating your ability, not punishing you.
10		Section-Level Scoring 60-90	Each of the three sections is reported on a 60-90 scale in 1-point increments; the section scores measure your performance in that content area.	Track all three section scores; a balanced 80/78/79 beats a lopsided spike, because schools see each one.	A score report shows Quantitative 84, Verbal 76, Data Insights 81 -- three separate 60-90 numbers.
11		Total Score 205-805	The total score ranges 205 to 805 in 10-point increments (e.g., 545, 555, 565) and combines all three sections -- Data Insights is included in the total, unlike the old separately-scored Integrated Reasoning section.	Set a target total by adding your three section targets, then reverse-engineer where you can gain points.	To reach 655, a candidate targets 80 + 78 + 79 instead of chasing one section to 90.
12		Percentiles & Concordance	Your total converts to a percentile ranking using GMAC's official concordance table (updated with each year's data); on current data, roughly 715 corresponds to the 99th percentile and about 705 to the 98th.	Percentiles change as the test-taking population changes -- compare yourself against the CURRENT table, not old books.	A 705 total shows as 98th percentile on the 2024-updated concordance, a far stronger ranking than the raw score sounds.
13		Unofficial Score Preview & Score Choice	At the end of the exam you see an unofficial preview of your score before you decide to accept or cancel it and before choosing which schools (if any) receive it.	In the final weeks, practice scoring without a "panic cancel" reflex -- decide your accept/cancel policy in advance.	A candidate finishes, sees 685, accepts, and sends it to three schools on the spot -- all before leaving the center.
14		Score Validity -- 5 Years	GMAT scores are valid for 5 years from the exam date; schools will not use scores older than that, and your mba.com score report lists the expiration for each attempt.	Time your exam so the score is still valid for every deadline on your target list -- including deferral options.	A 2025 test still counts for a Fall 2029 application (5 years), but not for an application cycle that starts in 2031.
15		Retake Policy	You may take the GMAT up to 5 times in a rolling 12-month period, with at least 16 days between attempts; each attempt requires a separate registration and fee.	Space retakes deliberately -- 16 days is the minimum, not a target; study the gap before rebooking.	A candidate who tests October 1 can retest October 17 at the earliest, and only if they have taken fewer than 5 exams in the last 12 months.
16		Registration, Fee & Delivery	You register through your mba.com account, paying the exam fee (about US\$275 in the U.S., varying by country and format -- the exact amount shows at checkout), and take the exam at an authorized Pearson VUE test center or online with live remote proctoring.	Register early for peak months; test centers and online slots fill around school deadlines.	A candidate books a center seat for 9:00 AM, pays ~\$275 at checkout, and gets a confirmation with check-in instructions.

The Quant section's foundation: how the GMAT tests integers, fractions, percents, exponents, and number rules -- always without a calculator.

#	Term	Key Facts	Strategy Tip	Example
17	Integers	Whole numbers and their negatives (... , ?2, ?1, 0, 1, 2, ...); GMAT arithmetic questions often hinge on whether a quantity must be an integer.	Read whether a variable is "an integer" before testing values -- it changes which numbers are legal.	If x is an integer and $3 \leq x \leq 7$, x can be 4, 5, or 6 -- not 4.5.
18	Positive vs Non-Negative	"Positive" means greater than zero; "non-negative" includes zero. These two words appear in data sufficiency stems more than any others.	In data sufficiency, test whether zero changes the answer -- it decides many yes/no questions.	"Is x positive?" is yes for $x = 3$, no for $x = 0$ -- a distinction the exam loves.
19	Odd & Even Rules	Odd $\pm$ odd = even; even $\pm$ even = even; odd $\pm$ even = odd; odd $\times$ odd = odd; any integer $\times$ even = even.	Apply rules to symbols: if the stem forces an odd product, every factor must be odd.	If ab is odd, then both a and b are odd -- an even factor would make the product even.
20	Primes	A positive integer greater than 1 with exactly two divisors (1 and itself); 2 is the only even prime. 1 is NOT prime.	On divisibility questions, break numbers into prime factors and account for all of them.	$30 = 2 \times 3 \times 5$; $60 = 2^2 \times 3 \times 5$ -- the extra 2 is what makes 60 divisible by 4 when 30 is not.
21	LCM & GCD	Least common multiple (smallest number divisible by both) and greatest common divisor (largest number dividing both); built from prime factorizations using max (LCM) or min (GCD) exponents.	"How often will two things coincide?" questions are always LCM questions.	Two buses run every 12 and 18 minutes; they align every 36 minutes (LCM of 12 and 18).
22	Divisibility Rules	Quick checks: even ($\div 2$), digit sum ($\div 3$, $\div 9$), last two digits ($\div 4$), last digit 0 or 5 ($\div 5$), even + digit-sum rule ($\div 6$), alternating sum ($\div 11$).	Use digit-sum rules to test answers fast when choices differ by divisibility.	1,482 is divisible by 3 because $1+4+8+2 = 15$, and by 2, so it is divisible by 6.
23	Remainders	Remainder = what's left after division; GMAT asks "what is the remainder when N is divided by k ?" and ties it to units digits and modular patterns.	For remainder questions, list the possible remainders (0 to $k-1$) and test small cases.	$29 \div 6 = 4$ remainder 5; the remainder is never negative and never reaches the divisor.
24	Consecutive Integers	Integers in sequence ($n, n+1, n+2, \dots$); the average of a set of consecutive integers is always the middle number; the median equals the mean.	For an odd count, the average is the middle value -- sum = average $\times$ count.	The average of 4, 5, 6, 7, 8 is 6 (the middle), so their sum is $6 \times 5 = 30$.
25	Fractions	Numerator/denominator with denominator $\neq 0$; adding and subtracting requires common denominators; multiplying and dividing do not.	Keep fractions as fractions in calculations -- converting to decimals early invites rounding error.	$1/6 + 1/4 = 2/12 + 3/12 = 5/12$, not $0.166 + 0.25 = 0.416$ (close, but the fraction is exact).
26	Decimals	Place-value representations; GMAT traps mix tenths, hundredths, and scientific notation with inequalities.	Align decimal places before comparing -- "2.5 vs 2.05" trips more candidates than it should.	$0.25 \geq 0.125$, and $2.05 \leq 2.5$ -- write them vertically to compare.
27	Percents	Percent = parts per hundred; " $x\%$ of y " = $(x/100) \times y$; percent change = $(\text{change} / \text{original}) \times 100$.	Always ask "percent of WHAT?" -- the base changes in successive-percent problems.	A \$50 price raised 10% becomes \$55; lowering \$55 by 10% gives \$49.50, not back to \$50.
28	Percent Increase/Decrease Sequences	Two sequential changes do NOT add -- a 50% increase then a 50% decrease nets a 25% loss because the second change applies to a different base.	Convert each change to a multiplier ($\times 1.5$, $\times 0.5$) and multiply them.	$\$100 \rightarrow +50\% = \$150 \rightarrow -50\% = \$75$; net multiplier $1.5 \times 0.5 = 0.75$.
29	Ratios	A ratio compares parts (e.g., 2:3); a ratio alone gives no actual quantities -- you need a total or one actual value.	Translate "a:b" into "a and b times a common multiplier k ," then use the total to solve for k .	Ratio 2:3 with 60 total objects: $2k + 3k = 60 \rightarrow k = 12 \rightarrow 24$ and 36.
30	Proportions	Two ratios set equal ($a/b = c/d$); cross-multiplication solves for the missing term -- when the relationship is directly proportional.	Confirm the direction first: as one quantity rises, does the other rise (proportion) or fall (inverse)?	If 3 pens cost \$6, then 9 pens cost \$18: $3/6 = 9/x \rightarrow x = 18$.
31	Exponents & Powers	Repeated multiplication: a^x ; rules: $a^x \cdot a^y = a^{x+y}$, $a^x/a^y = a^{x-y}$, $(a^x)^y = a^{xy}$, $a^0 = 1$ ($a \neq 0$), $a^{-x} = 1/a^x$.	Match bases before applying rules -- convert 4 to 2^2 , 8 to 2^3 , etc.	$4^? = (2^2)^? = 2^{2?}$; comparing $2^{1?}$ vs $8^3 = (2^3)^3 = 2^9$ shows $4^?$ wins.

32	GMAT Study Guide	Roots & Radicals	$\sqrt{a-b} = \sqrt{a}-\sqrt{b}$, $\sqrt{a/b} = \sqrt{a}/\sqrt{b}$, but $\sqrt{a+b} \neq \sqrt{a} + \sqrt{b}$; $\sqrt{a^2} = \text{abs}(a)$.	On the exam, simplify roots to "clean" forms -- answer choices are usually presented simplified.	$\sqrt{72} = \sqrt{(36 \cdot 2)} = 6\sqrt{2}$, not $\sqrt{36} + \sqrt{2}$.
33		Absolute Value	$\text{abs}(a)$ = distance from zero: $\text{abs}(x) = k$ means $x = k$ or $x = -k$; $\text{abs}(x) \leq k$ means $-k \leq x \leq k$.	Convert absolute-value statements into two cases or one compound inequality before solving.	$\text{abs}(x - 3) = 5 \rightarrow x = 8$ or $x = -2$.
34		Order of Operations	Parentheses $\rightarrow$ exponents $\rightarrow$ multiplication/division (left to right) $\rightarrow$ addition/subtraction (left to right); the GMAT rewards careful step order.	Write each step; "sloppy one-line math" is how sign errors slip in.	$2 + 3 \times 4^2 = 2 + 3 \times 16 = 2 + 48 = 50$, not $(5 \times 16) = 80$.

Part 3: Algebra (18 Concepts)

The second Quant pillar: equations, inequalities, functions, and the translation of word problems into algebra.

#	Term	Key Facts	Strategy Tip	Example
35	Variables & Expressions	Letters stand for unknown values; a single equation with two variables has infinitely many solutions unless more conditions are given.	Count equations vs unknowns before solving -- 2 equations $\times$ 2 unknowns is solvable; 1×2 is not.	$x + y = 10$ alone allows (1,9), (2,8), ... -- no unique answer.
36	Linear Equations	First-degree equations ($ax + b = c$) solved by isolating the variable with inverse operations on both sides.	Whatever you do to one side, do to the other -- and verify by plugging the answer back in.	$3x + 4 = 11 \rightarrow 3x = 15 \rightarrow x = 5$; check: $15 + 4 = 11$.
37	Solving Systems (Substitution & Elimination)	Two linear equations, two unknowns: substitute one expression into the other, or add/subtract equations to eliminate a variable.	Eliminate when coefficients align; substitute when one variable is already isolated.	$x + y = 7$ and $x - y = 3$: adding gives $2x = 10 \rightarrow x = 5$, $y = 2$.
38	Inequalities	Solved like equations EXCEPT multiplying or dividing by a negative flips the direction; the GMAT tests the flip relentlessly.	When you divide both sides by a variable that could be negative, split into cases.	$2x \geq 6 \rightarrow x \geq 3$ (sign flipped), not $x \leq 3$.
39	Compound Inequalities	Two conditions joined by "and" (overlap) or "or" (union); written as $3 \leq x < 7$ means $x \geq 3$ AND $x < 7$.	Sketch a number line for compound statements -- overlap and union are visual.	$4 \leq x \leq 1$ and $x \geq 0$ overlap on $0 \leq x \leq 1$.
40	Quadratic Equations	$ax^2 + bx + c = 0$; solved by factoring, the quadratic formula, or completing the square; up to two real roots.	Before factoring, get one side to zero; check your factors by multiplying back.	$x^2 + 5x + 6 = 0 \rightarrow (x + 2)(x + 3) = 0 \rightarrow x = -2$ or -3 .
41	Factoring Patterns	Difference of squares: $a^2 - b^2 = (a+b)(a-b)$; perfect square: $a^2 \pm 2ab + b^2 = (a \pm b)^2$; common factor extraction is step one.	Spot difference-of-squares first -- the GMAT uses it in disguise (e.g., $99^2 - 1$).	$99^2 - 1 = (100-1)^2 - 1 = (99 + 1)(99 - 1) = 98 \times 100 = 9,800$.
42	FOIL & Expansion	$(a+b)(c+d) = ac + ad + bc + bd$; the inverse of factoring; used heavily in word problems and symbolic-expression items.	When in doubt, expand; GMAT answers reward clean algebra over cleverness.	$(x + 3)(x + 2) = x^2 + x + 6$.
43	Functions in Notation	$f(x)$ defines an output for each input; GMAT also uses symbolic functions like $x \# y = x^2 + y$ (defined in the stem).	Read the DEFINED rule literally and substitute carefully -- these are pure plug-in problems.	If $a \# b = a^2 \# b$, then $5 \# 2 = 25 \# 2 = 23$.
44	Solving for a Variable in Terms of Others	Rearranging formulas (e.g., solve for r in $A = r^2$ or for y in $2y = 3x + 6$) -- the core of "literal equation" problems.	Isolate the target variable step-by-step; fractions in the answer are fine.	$2y = 3x + 6 \rightarrow y = (3x + 6)/2 = 1.5x + 3$.
45	Translating Words to Algebra	"Is/are/was" = equals; "more than" = +; "of" = $\times$; "per" = $\div$; "twice" = $2 \times$; "less than" flips order ("5 less than x " = $x - 5$).	Write the equation in the same sentence order, then check "5 less than x " $\neq$ " $5 \times x$ ".	"Three more than twice a number is 15" $\rightarrow 2n + 3 = 15 \rightarrow n = 6$.
46	Consecutive Integer Word Problems	Model as $n, n+1, n+2$ (or $n, n+2, n+4$ for evens/odds); sum equations solve for n .	Let the MIDDLE integer be n for odd-length sets -- sums get simpler.	Three consecutive integers sum to 36: $(n-1) + n + (n+1) = 3n = 36 \rightarrow n = 12 \rightarrow 11, 12, 13$.
47	Direct Variation	$y = kx$: y divided by x is constant; doubling x doubles y .	Write the constant first: " y varies directly with x " $\rightarrow y/x = k$, solve k from one pair.	If $y = 12$ when $x = 4$, then $y = 21$ when $x = 7$ ($k = 3$).
48	Inverse Variation	$y = k/x$: the product xy is constant; doubling x halves y .	Contrast with direct: inverse means "more x = less y ."	If $y = 6$ when $x = 4$ ($k = 24$), then $y = 3$ when $x = 8$.
49	Absolute Value Equations with Variables	$\text{abs}(ax + b) = c \rightarrow$ two equations; $\text{abs}(ax + b) \leq c \rightarrow$ compound inequality; watch for NO-SOLUTION cases ($\text{abs}(\text{expression}) = \text{negative}$).	Test each case against the original equation -- extraneous roots get eliminated.	$\text{abs}(2x - 1) = 7 \rightarrow 2x - 1 = 7$ or $2x - 1 = -7 \rightarrow x = 4$ or $x = -3$.
50	Exponent Rules Applied to			

$(x?)^? = x???$; $x?-x? = x???$;

fractional exponents = roots
 $(x^{1/2}) = \sqrt{x}$; negative
exponents = reciprocals.

Convert everything to a

$(x^2)^3 = x^?$; $x^?/x^2 = x^3$; $8^{(2/3)} =$

51	GMAT Study Guide	Algebraic Fractions & Rational Expressions	Fractions with variables; simplify by factoring numerator and denominator and canceling common factors; note values that make the denominator zero.	State the domain restriction (denominator $\neq 0$) -- it can matter in answer-choice elimination.	$(x^2 - 9)/(x - 3)$ simplifies to $x + 3$, valid for $x \neq 3$.
52		Geometry-Free Coordinate Basics	The current exam removed geometry, but linear-coordinate skills still appear as algebra: slope $m = (y_2 - y_1)/(x_2 - x_1)$, intercept form $y = mx + b$, parallel = equal slopes.	Treat slope questions as pure algebra: two points give a line, one point plus slope gives the line.	Line through (1, 2) and (3, 8): $m = 6/2 = 3$, so $y = 3x + 1$.

Part 4: Word Problems (16 Concepts)

Rates, averages, mixtures, and business math -- the applied Quant questions that combine algebra with real-world setups.

#	Term	Key Facts	Strategy Tip	Example
53	Rate $\times$ Time = Distance	$d = r \cdot t$; convert units before solving (minutes $\rightarrow$ hours); solve for the missing quantity.	Build a small table (rate, time, distance) per vehicle/person -- tables beat mental math.	A car at 60 mph for 2.5 hours covers 150 miles.
54	Average Speed	Average speed = TOTAL distance / TOTAL time -- never the arithmetic mean of two speeds unless times are equal.	Compute both legs: distance and time separately, then divide the sums.	30 miles at 30 mph (1 h) + 30 miles at 60 mph (0.5 h): $60/1.5 = 40$ mph average.
55	Combined Work	Two workers complete $1/(\text{time})$ of a job per unit time; combined rate = sum of individual rates; time = $1 / \text{combined rate}$.	Add rates as fractions of the job per hour, then invert.	A fills a tank in 3 h, B in 6 h: $1/3 + 1/6 = 1/2$ job/hour $\rightarrow$ 2 hours together.
56	Work with Taps & Leaks	Fill and drain are opposite rates: fill rate positive, drain rate negative; net rate = fill $\pm$ drain.	Combine signs first, then invert to get net time.	A tap fills in 4 h and a drain empties in 6 h: $1/4 - 1/6 = 1/12$ $\rightarrow$ 12 hours to fill with the drain open.
57	Mixture Problems	Mixing two concentrations yields a weighted average; total amount $\times$ concentration balances across components.	Set up: amount $\times$ conc $\pm$ amount $\times$ conc $\pm$ = total $\times$ conc $\pm$ total, with a second equation for amounts.	2 L of 10% + 3 L of 20% $\rightarrow$ 0.2 + 0.6 = 0.8 units acid in 5 L = 16%.
58	Simple Interest	$I = P \cdot r \cdot t$ (principal $\times$ annual rate $\times$ time in years); GMAT uses it in savings and loan setups.	Keep time in years -- 6 months is 0.5, not 6.	\$1,000 at 4% simple interest for 2 years earns \$80.
59	Compound Interest	$A = P(1 + r/n)^{nt}$; the "interest on interest" effect; GMAT alternates between yearly and semi-annual compounding.	Convert n correctly (quarterly $n = 4$) and read whether r is annual.	\$1,000 at 4% compounded annually for 2 years: $1000(1.04)^2 = \$1,081.60$.
60	Profit, Markup & Discount	Profit = revenue $\pm$ cost; markup is a percentage of COST; discount is a percentage of the PRICE; the bases differ.	Identify the base of every percentage in the sentence -- it decides the arithmetic.	Cost \$40, marked up 25% $\rightarrow$ price \$50; then a 10% "sale" discount applies to \$50 $\rightarrow$ \$45.
61	Percent Change Word Problems	Change/original $\times 100$; "increased by 20%" = $\times 1.2$; "decreased by 25%" = $\times 0.75$; successive changes multiply.	Convert each phrase to a multiplier and multiply; only then convert back to a percent.	Price rose 20% then fell 20%: $\times 1.2 \times 0.8 = \times 0.96 =$ a 4% net decrease.
62	Sums & Averages	Total = average $\times$ number of items; missing-value questions solve for the total difference.	Use total-based thinking: "needed to raise the average" = total shortfall $\div$ remaining items.	Five tests averaging 80 total 400; a 6th test must score 100 to pull the average to 83.3 (total needed 500).
63	Weighted Averages	When groups have different sizes, the overall average weights each group by its count -- not by a 50/50 mean.	Compute group totals and divide by the grand total of items.	10 students average 70 and 30 average 90: $(700 + 2700)/40 = 85$.
64	Median & Ordering	Median = middle value of an ordered list (for an odd count) or the mean of the two middles (even count); ordering matters.	Sort before locating the median -- a common trap is using the given order.	Data 3, 5, 8, 10, 100: median 8, while the mean is far higher.
65	Overlapping Sets (Two Categories)	A double-set matrix (rows $\times$ columns: "in X / not in X" and "in Y / not in Y") handles all two-category grouping questions.	Fill the 4 interior cells plus margins; totals check every row and column.	100 people, 60 in club A, 50 in club B, 20 in both $\rightarrow$ 70 in at least one, 30 in neither.
66	Venn/Grouping with Three Sets	Three overlapping circles require careful double-counting; GMAT mostly tests the two-set case or gives complete three-set data.	Anchor on the "all three" center and work outward when data permits.	With $A=30, B=25, C=20, A \cap B \cap C=5$, and singles given, recompute each circle's "only" count before adding.
67	Counting Principle	If a choice has m options and an independent next choice has n options, total = $m \times n$; extends to three or more stages.	Count stages, then multiply -- "and" multiplies, "or" adds.	4 shirts $\times$ 3 pants $\times$ 2 shoes = 24 outfits.

68	GMAT Study Guide	Probability Basics	P = favorable / total; P(not A) = 1 - P(A); for independent events P(A and B) = P(A) × P(B); for "or," subtract the overlap.	Turn "at least one" into 1 - P(none) -- usually far faster.	Two coins: P(at least one head) = 1 - (1/2 × 1/2) = 3/4.
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Part 5: Statistics, Probability & Counting (14 Concepts)

Quant's data-analysis corner: averages, spread, and the counting/probability machinery the GMAT reuses across sections.

#	Term	Key Facts	Strategy Tip	Example
69	Mean, Median & Mode	Mean = sum/count; median = middle of ordered data; mode = most frequent value. The GMAT asks about their relationships and changes when values are altered.	When one value changes, update the SUM, then recompute the mean.	Set {2, 4, 6, 8} mean 5; changing 8 to 12 raises the sum by 4 -> mean 6.
70	Range	Range = largest - smallest; a measure of spread that ignores the middle entirely.	Range questions hinge on extremes only -- track the max and min, nothing else.	Data ranging 3 to 20 has range 17, regardless of the middle values.
71	Standard Deviation (Concept)	SD measures how spread out data are around the mean; GMAT asks conceptually (which set is more spread?) more than computationally.	More spread = larger SD; adding a constant shifts the mean but NOT the SD; multiplying scales the SD.	Set {1,2,3} has smaller SD than {1,5,9} -- the second is more spread.
72	Sum-Based Average Manipulation	Total = average × count works backward: given a desired average and the number of items, find the required total.	For "how much must the next value be," multiply target average × (n+1) and subtract the current total.	Three scores total 240; to reach an average of 90 with a 4th score: 360 - 240 = 120.
73	Frequency Tables	Data presented as value-with-count tables; mean and median are computed by weighting each value by its frequency.	Rebuild the full distribution mentally using cumulative counts to find the median position.	Table: 1×3, 2×5, 3×2 -> total 10 items, mean (3+10+6)/10 = 1.9, median sits between the 5th and 6th values = 2.
74	Probability Rules	P(A) = favorable/total; complement rule 1 - P(A); addition rule P(A or B) = P(A) + P(B) - P(A&B) when overlapping.	"Or" questions: add, then subtract what got double-counted.	Rolling a die: P(2 or even) = 1/6 + 3/6 - 1/6 = 3/6 (only the 2 overlaps).
75	Independent Events	Two events are independent when one's outcome doesn't affect the other; P(A and B) = P(A) × P(B).	Repeated trials (coin flips, dice) are independent unless the stem says otherwise.	P(two heads in a row) = 1/2 × 1/2 = 1/4.
76	Dependent Probability (Without Replacement)	When draws remove items, the denominator shrinks after each draw -- the classic cards/balls trap.	Multiply the sequential probabilities with updated denominators.	From 3 red + 5 blue, P(two reds without replacement) = 3/8 × 2/7 = 6/56.
77	"At Least One"	The complement shortcut: P(at least one success) = 1 - P(no successes across all trials).	Always reach for the complement when the stem says "at least one."	Four independent attempts each 50% likely: P(at least one success) = 1 - (1/2)^4 = 15/16.
78	Permutations	Ordered arrangements: nPr = n!/(n-r)!; order MATTERS (podium finishers, seating).	Ask "does swapping the two choices change the outcome?" If yes -> permutation.	3 of 5 candidates for 3 distinct roles: 5P3 = 5×4×3 = 60.
79	Combinations	Unordered selections: nCr = n!/(r!(n-r)!); order does NOT matter (teams, committees).	Ask the swap test: "team AB" = "team BA," so it's a combination.	Choosing 3 of 5 committee members: 5C3 = 10.
80	Factorials	n! = n × (n-1) × ... × 1; 0! = 1; GMAT uses them in permutation/combination formulas and in divisibility of large products.	Cancel factorials before multiplying -- n!/k! telescopes when n and k are close.	8!/(5!-3!) = (8-7-6)/(3-2-1) = 56.
81	Probability with Combinations	When selections are unordered, count favorable combos and total combos with nCr, then divide.	For "from a group, what's the chance the chosen set has property X," always combo-count.	From 5 men/4 women, P(both chosen are women) = 4C2 / 9C2 = 6/36 = 1/6.
82	Geometric Probability (Conceptual)	Probability as a ratio of "favorable region" to "total region"; appears rarely, and only conceptually -- never with advanced geometry on the current exam.	If a stem asks for a likelihood over a segment/interval, compare lengths, not counts.	A point picked at random on a 12-unit line segment falling in a 3-unit mark has probability 3/12 = 1/4.

Part 6: Functions, Sequences & Number Patterns (14 Concepts)

The algebra-adjacent topics that round out Quant: defined functions, sequences, exponent patterns, and the GMAT's favorite "hidden rule" questions.

#	Term	Key Facts	Strategy Tip	Example
83	Linear Functions & Slope	$y = mx + b$; m is slope (rise/run), b the y-intercept; parallel lines share slopes; perpendicular slopes multiply to -1 .	From two points, compute slope first, then solve for b with one point.	Line through $(0, 3)$ with slope 2: $y = 2x + 3$.
84	Quadratic Function Graphs	$y = ax^2 + bx + c$ opens up if $a > 0$, down if $a < 0$; vertex halfway between the roots; c is the y-intercept.	Link sign of a to "opens up/down" to reason about maxima/minima without calculus.	$y = x^2 - 2x - 3$: roots -1 and 3 , vertex at $x = 1$, opens up.
85	Defined/Symbolic Functions	The stem DEFINES a new operator (e.g., $x \otimes y = xy + x$); every such question is a pure substitution exercise.	Write the definition at the top of the page and plug in exactly as written.	If $a \otimes b = ab + a$, then $3 \otimes 4 = 12 + 3 = 15$, but $4 \otimes 3 = 12 + 4 = 16$ -- order can matter.
86	Arithmetic Sequences	Each term adds a constant difference d : $a_n = a_1 + (n-1)d$; the mean of any symmetric pair of terms equals the middle.	Average of the first and last terms $\times n$ gives the sum of any arithmetic sequence.	2, 5, 8, 11, 14: sum = $(2+14)/2 \times 5 = 40$.
87	Geometric Sequences	Each term multiplies by a constant ratio r : $a_n = a_1 r^{n-1}$; growth/decay problems are geometric.	Identify r by dividing consecutive terms; then write the explicit formula.	3, 6, 12, 24: $r = 2$, so the 5th term is $3 \times 2^4 = 48$.
88	Recursive Sequences	Defined by how each term follows the previous (e.g., $a_n = a_{n-1} + 4$, or add the two prior terms like Fibonacci).	Compute term-by-term and WRITE THEM DOWN -- pattern spotting beats formula guessing.	$a_1 = 1$, $a_n = 2a_{n-1} + 1$ --> terms 1, 3, 7, 15, 31.
89	Units Digits of Powers	Units digits cycle: powers of 2 cycle 2,4,8,6; powers of 3 cycle 3,9,7,1; divide the exponent by the cycle length to find the position.	For "units digit of a big power," find the cycle length, then exponent mod cycle.	Units digit of 2^{13} : cycle 2,4,8,6; $13 \bmod 4 = 1$ --> 2.
90	Powers of 2 & Growth	Doubling patterns (2^n) dominate GMAT growth questions; $2^{10} = 1,024$ is worth knowing cold.	Convert growth phrases ("doubles every period") into 2^n right away.	A population doubling hourly: 1 --> 2^n after n hours; $2^{10} = 1,024$ after ten hours.
91	Remainders in Patterns	Division patterns repeat over the divisor: list a few terms and find the repeating cycle.	Generate the first 4-6 terms, find the cycle, then map the large index into it.	7, 14, 21, 28, 35 all leave remainder 0 when divided by 7 -- check where your term lands.
92	Max/Min of a Quadratic	The vertex of $y = ax^2 + bx + c$ sits at $x = -b/(2a)$; gives max ($a < 0$) or min ($a > 0$) inputs for word problems.	For price/quantity revenue problems, write the quadratic, then plug the vertex x .	Revenue $R = -p^2 + 60p$ peaks at $p = 30$ --> max $R = 900$.
93	Absolute Value as Distance		$\text{abs}(a - b)$ = distance between a and b on the number line; $\text{abs}(x - 4) \leq 3$ means x is within 3 units of 4.	"Within 3 of 4" --> $1 \leq x \leq 7$, which is exactly $\text{abs}(x - 4) \leq 3$.
94	Inequalities with Unknown Signs	Dividing by a variable that may be negative flips the inequality; the GMAT tests this in data sufficiency constantly.	Split into cases ($x > 0$ and $x < 0$) or rephrase to avoid dividing by the variable.	If $xy > 0$, dividing by y is safe ($y \neq 0$, and sign is positive), so $x > 0$ follows only when y is known positive.
95	Approximation & Estimation	GMAT Quant answers are exact, but estimating eliminates choices -- round to friendly numbers and bound the result.	Round both values the same direction (up/up or down/down) to keep the estimate honest.	$(49 \times 51) \approx 50 \times 50 = 2,500$, which is 2,499 -- the true product.
96	Number Line Theory	Negative/positive sides, spacing, and midpoints: midpoint of a and $b = (a + b)/2$; GMAT tests relative positions.	For midpoint questions, average the two coordinates -- including negatives.	Midpoint of 78 and 4 is 41.

Part 7: Verbal -- Reading Comprehension (16 Concepts)

The RC playbook: what passages look like, the five question families, and the reading method that wins.

#	Term	Key Facts	Strategy Tip	Example
97	Reading Comprehension Passages	13-14 RC questions spread across 3-4 passages per exam; passages cover business, science, and social science, one to several paragraphs long.	Expect roughly 4 questions per passage -- the passage is a shared resource, so mine it fully.	A 3-paragraph passage on labor economics drives four questions: main idea, detail, inference, tone.
98	Passage Map Method	While reading, write 5-8 words per paragraph: what the paragraph does and the overall structure (theory -> evidence -> critique).	Your map answers structure questions in seconds; never read a passage without mapping.	Para 1 "proposes theory," 2 "evidence supports," 3 "author's caveat" --> the passage is an evaluation.
99	Main Idea Questions	Ask for the author's overall point; correct answers match		

the FULL passage scope,
wrong ones cover only a
paragraph or go beyond it.

Pre-phrase the answer in one
sentence BEFORE reading the

A passage comparing two studies has main idea "the

Locate the exact sentence via

"According to the passage" ->

101	GMAT Study Guide	Inference Questions	The answer is LOGICALLY REQUIRED by the passage but not stated; GMAT inferences are tight -- "must be true," not "could be true."	Ask "does the passage force this conclusion?" If it only suggests, it's wrong.	The passage says all members of the guild pay dues; inference: any non-payer is not a member.
102		Tone & Attitude Questions	Ask how the author feels -- approve, criticize, cautious, neutral; tone words live in adjectives and verbs.	Match the strength of the emotion: "cautious support" ? "wholehearted endorsement."	"The study's results, while promising, leave questions open" = measured/cautious tone.
103		Structure/Function Questions	Ask what a sentence or paragraph DOES (introduce, qualify, contrast, illustrate) rather than what it says.	Name the job first: "this paragraph concedes a point before rebutting it."	A paragraph that begins "Critics contend..." before the author's "however" serves as a concession.
104		Scope Trap	Wrong answers import outside knowledge or shift the subject slightly ("micro-lending" vs "all lending").	Every answer must stay inside the passage's subject; reject anything that widens it.	Passage on one industry shouldn't pick an answer generalizing to the whole economy.
105		Extreme Wording Trap	Words like "always, never, all, only, proves" rarely match RC text; soft words ("may, some, often") usually survive.	Flag absolutes in answer choices -- they are wrong more often than not.	"The theory is never valid" is nearly always beatable by "the theory has limits."
106		Fact vs Opinion	Passages mix reported facts with the author's judgment; questions test whether you can tell them apart.	Classify every sentence while mapping: F for fact, O for opinion/interpretation.	"Sales fell 5% (fact); the decline reflects poor strategy (opinion)" -- a question can hinge on that line.
107		Strengthen/Weaken (Passage Argument)	Some RC stems ask which choice supports or undermines the position taken in the passage -- CR logic inside RC.	Isolate the author's claim, then ask which option helps/hurts only that claim.	The passage claims rent control reduces housing; a choice showing new construction fell supports it.
108		RC Time Budget	RC consumes 1.5-2 minutes reading plus ~1 minute per question; a 4-question passage is a ~6-minute block.	Read at a deliberate, map-making pace -- re-reading later costs more than reading once.	In 45 minutes, two long passages (~12 min) plus your CR questions still leaves a safe cushion.
109		The "Read Once" Discipline	Skimming then re-reading wastes time; a single structured read with a map removes the need to reread.	After mapping, questions send you straight to the right paragraph -- no full re-reads.	A detail question about "the author's caveat" sends you directly to paragraph 3 via the map.
110		Active Reading Markers	Connection words are signposts: however/but (contrast), therefore/thus (conclusion), for example (support), similarly (extension).	Underline the signposts while reading; they ARE the structure of the passage.	"However, the data do not support this claim" announces the passage's pivot -- and usually its main idea.
111		Hypothesis-Evidence Passages	Common RC template: hypothesis introduced, evidence marshaled, rival view considered, author settles.	Map with labels (H, E, Rival, Verdict) -- structure questions answer themselves.	"De-extinction (H); two studies (E1, E2); critics (Rival); author's compromise (Verdict)".
112		Vocabulary in Context	RC does NOT test vocabulary directly on the current exam, but a wrong understanding of a key word can sink a sentence.	When an unfamiliar word appears, infer meaning from the sentence's logic rather than stopping.	"The policy proved feckless" in a paragraph about failures -> the policies were ineffective.

Part 8: Verbal -- Critical Reasoning (20 Concepts)

CR tests argument logic: how arguments are built, how they break, and the question families that exploit each break.

#	Term	Key Facts	Strategy Tip	Example
113	Argument Anatomy	Every argument has a conclusion (the claim) and premises (the support); the gap between them is the assumption.	Before reading choices, label each sentence: premise or conclusion.	"Studies show sleep boosts memory (premise); students should sleep more before exams (conclusion)."
114	Premise & Conclusion Indicators	Conclusion words: therefore, thus, hence, so, clearly, consequently. Premise words: because, since, given that, as shown by.	Find the conclusion first -- every CR question family orbits it.	"Because turnover is high (premise), the firm should raise salaries (conclusion)."
115	Assumptions (Necessary)	An assumption is an unstated premise that MUST be true for the conclusion to hold; the negation test kills it: if negated, the argument falls apart.	Test candidates by negating: "if the opposite were true, would the conclusion be destroyed?" If yes, it's the assumption.	"We should hire more staff because requests are rising" assumes rising requests persist or that current staff can't handle them.
116	Weaken Questions	Ask which choice most undermines the conclusion; correct answers attack the assumption or introduce a counter-fact.	Find the assumption, then hunt the choice that damages exactly that link.	Conclusion "advertising drove sales"; weakening evidence: sales rose in regions with no ads.
117	Strengthen Questions	Ask which choice most supports the conclusion; correct answers shore up the assumption or rule out		

Strengthen = protect the assumption; address the most vulnerable link.	"Survey responders are representative of all customers" strengthens a survey-based conclusion.
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118	GMAT Study Guide	The Negation Test	Systematically negate each candidate in assumption questions; the one whose negation collapses the argument is correct.	Negate carefully: "some" ? "none," "all" ? "not all," "most" ? "half or less."	Assumption: "the sample is random" -- negated, "the sample is not random" destroys generalizability.
119		Inference/Conclusion Questions	The correct answer MUST follow from the given facts with certainty -- not merely plausibly.	Check each choice with "is this GUARANTEED by the premises?"	Given all employees get 20 days and Jana is an employee -> Jana gets 20 days.
120		Paradox/Explain Questions	Present an apparent contradiction and ask which choice resolves it; correct answers make both facts coexist.	The best explanation keeps BOTH observations true -- never explains one by denying the other.	"Sales up, but revenue down" is resolved by "prices were cut."
121		Evaluate Questions	Ask which piece of missing information would best help judge the argument; the correct answer is decision-relevant.	Turn each choice into a question; the one whose yes/no answer changes the conclusion wins.	"Does the comparison group share the same conditions?" decides whether the experiment is valid.
122		Boldface Questions	Identify what each bolded sentence DOES in the argument (conclusion, premise, evidence, concession).	Determine the argument's conclusion first, then label the bolded roles.	"Many think X (counterpoint); however, the data show Y (conclusion-pivot)".
123		Flaw Questions	Ask what's wrong with the reasoning; choices name the error (correlation->causation, sampling, false dichotomy, etc.).	Name the flaw in your own words BEFORE reading the choice list.	Concluding a training program caused sales because sales rose after it = post-hoc/causation error.
124		Parallel Reasoning	Present the argument's LOGICAL SHAPE (if A then B; A; therefore B), then match a choice with the same shape.	Abstract the argument into variables and compare structure, not subject matter.	"All X are Y; Z is X; so Z is Y" must match another "All P are Q; R is P; so R is Q."
125		Principle Questions	Ask which general rule the argument illustrates, or which choice the principle supports.	State the principle as an if-then rule and test each choice against it.	Principle "consumers choose lower prices"; argument: a tax cut will shift buying behavior.
126		Correlation vs Causation	Correlation does not establish causation; third variables and reverse causation are the standard flaws.	When you see "A rose and B rose; hence A caused B," hunt for the confound.	Ice cream sales and drownings both rise in summer; neither causes the other -- heat does.
127		Sampling & Representativeness	Conclusions drawn from an unrepresentative sample are weak; strengthen by showing the sample matches the population.	Ask "who was surveyed, and who is the conclusion about?" -- they must align.	Surveying only current customers can't support a claim about all potential buyers.
128		Quantifier Words	Some = at least one; most = more than half; all = every; none = zero. Precision here decides many answers.	Translate quantifiers literally -- tests trade on "some" vs "all" conflation.	"Most voters favor X" allows 40% to oppose; "some" could be a single voter.
129		Scope of the Conclusion	Conclusions about "all firms" can't rest on evidence about "this firm"; wrong answers stretch or shrink scope.	Match the conclusion's population to the evidence's population exactly.	Evidence about imported cars supports only conclusions about imports, not all cars.
130		Assumption vs Strengthen	An assumption is REQUIRED; a strengthener merely HELPS. The same statement can be both, but question types differ.	For "assumption," use negation; for "strengthen," ask "does this help?"	"Weather was normal" is required if the conclusion depends on it; "weather was sunny" only helps.
131		Answer Choice Patterns	Wrong CR choices: out of scope, opposite direction, too extreme, or "true but irrelevant."	Eliminate by ROLE first (does it touch the conclusion?), then by truth.	A true statement about the environment doesn't strengthen a conclusion about prices -- role fails.
132		CR Timing & Triage	23 CR+RC questions in 45 minutes ? under 2 minutes per question; long argument stems deserve a 30-second argument sketch.	If a CR question eats 2:30, mark and move -- verbal score rewards completion.	A candidate skips the 2-minute 30-second monster after a 30-second attempt and keeps the clock alive for three easier questions.

Part 9: Data Insights -- Overview & Formats (14 Concepts)

Data Insights replaces the old Integrated Reasoning section: it measures how well you read, sort, and reason over real-world data in five specific formats.

#	Term	Key Facts	Strategy Tip	Example
133	What Data Insights Measures	DI tests the ability to evaluate data presented in multiple formats from multiple sources -- tables, charts, text, and quantitative reasoning combined; it counts fully toward your total 60-90 section score.	Treat DI as its own discipline: it reuses Quant and Verbal skills but with different formats and pacing.	A DI item pairs a sortable table with a short memo and asks whether the memo's claim is supported by the data.

134	GMAT Study Guide	The Five DI Formats	DI has five question types: data sufficiency, multi-source reasoning, table analysis, graphics interpretation, and two-part analysis -- 20 questions in 45 minutes.	Learn the mechanics of all five BEFORE speed practice; format errors waste more time than content errors.	A practice session deliberately runs one of each format until the interface is second nature.
135	On-Screen Calculator		A basic on-screen calculator is available ONLY in the Data Insights section; Quant has no calculator at all.	Use the DI calculator for arithmetic-heavy items, but keep mental math for anything simple -- clicking costs seconds.	A percent-change DI item: punch $8,470 \times 1.18$ into the pop-up calculator instead of long-handling it.
136	Sortable Tables (Table Analysis)		Table analysis presents a spreadsheet-like table you can sort by any column; statements are answered true/false (or yes/no).	Click through sorts to compare columns -- every sort is free information; read all statements before sorting.	Sorting by "region" groups the rows; the statement "the West region had the highest total" is then a glance-check.
137	Graphics Interpretation		A graph (bar, line, pie, scatter) supports fill-in-the-blank statements answered via pull-down menus.	Read the axis labels and units first; verify the scale before reading values.	A stacked bar chart of revenue by year: the pull-down asks which year had the largest services share -- scale first.
138	Multi-Source Reasoning		Two or three tabbed sources (emails, reports, spreadsheets) answer both multiple-choice and opposite-answer (yes/no) questions.	Read each tab once, then go question-by-question, opening exactly the tab the question needs.	Tab 1 is an email, Tab 2 a budget, Tab 3 a meeting note; a question about approval authority lives in Tab 1.
139	Two-Part Analysis		One scenario, two linked columns of answer options; you choose one option per column, and the two choices must satisfy the scenario together.	Solve for the relationship first; options are usually numbers -- test candidate pairs.	"Set two prices so that revenue doubles": if options are 10/12/15/20, find the pair where $2 \times \text{price} \times (\text{new demand})$ works.
140	Data Sufficiency in DI		The classic GMAT question family lives in DI: a question stem plus two statements; you judge whether the statements provide enough information -- you never need the numeric answer.	Memorize the five answer choices cold (see Part 10) so the format costs zero mental budget.	"What is x ? (1) $x + y = 5$ (2) $x + y = 1$ " -- each alone insufficient, together sufficient.
141	DI Answer Formats		DI uses traditional 5-choice MC, yes/no (opposite answers), true/false statements, and pull-down menus -- four response mechanics.	Practice each response mechanic; clicking the wrong format is a weird way to lose points.	A statement set with "True/False" pairs requires one click per row -- no partial credit for marking the row twice.
142	DI Pacing		20 questions/45 minutes = 2.25 minutes per item, but data-heavy items need more; bank time on fast DS items.	Two passes: knock out quick DS items first, then return to multi-source monsters.	A candidate answers 8 DS items in 12 minutes, then spends the remaining 33 on the heavier formats.
143	The IR Heritage		The old Integrated Reasoning section (12 questions, scored 1-8, separate from the total) was retired with the classic GMAT; today's DI is longer (20 Q), scored 60-90, and counts in the total.	Ignore old "IR 1-8" score talk in legacy guides -- the current exam reports DI on the 60-90 scale.	A 2019 article says "GMAT IR score 8 is rare" -- that framing no longer applies to the current exam.
144	Answer-Every-Question Rule		Unanswered questions are counted as incorrect; with no wrong-answer penalty beyond that, a flagged guess beats an empty cell.	Always get SOMETHING in for every DI question, especially the last few.	With 40 seconds left, a candidate guesses intelligently on the final multi-source item instead of leaving it blank.
145	Data Sufficiency Independence		In DS, the two statements are always TRUE (never false) and independent; you evaluate them separately before combining.	Test statement (1) ALONE first, then (2) ALONE, then together -- never let one influence the other.	If (1) gives $x = 3$ or 4 and (2) gives $x = 3$ or 5, together they may still be insufficient -- check carefully.
146	Not Enough Information Is an Answer		DS is the only GMAT format where "cannot be determined" is a legitimate, common correct answer.	Resist the urge to force sufficiency; sometimes the honest answer is E (or C-insufficient).	"Is $x \geq 0$? (1) $x^2 = 4$ (2) $x^3 = 8$ " -- (1) alone gives ± 2 (insufficient), (2) alone gives 2 (sufficient): answer B.

Part 10: Data Sufficiency -- The Complete System (18 Concepts)

Data sufficiency is 20-25% of Quant AND the anchor of DI -- this is the highest-leverage skill on the whole exam.

#	Term	Key Facts	Strategy Tip	Example
147	DS Structure	A question stem (possibly with given facts) followed by two statements, labeled (1) and (2); you decide the information's sufficiency.	Read the stem's question FIRST and rephrase it before touching the statements.	Stem "What is the value of x ?" -- the question is a VALUE question: one unique number needed.

148	GMAT Study Guide	The Five Answer Choices	A = (1) alone sufficient, (2) not; B = (2) alone sufficient, (1) not; C = together sufficient, neither alone; D = each alone sufficient; E = together still NOT sufficient.	Drill the choices until they're reflex -- thousands of DS points ride on instant recognition.	Seeing "D" in a flash means both statements work independently -- always check both.
149		Value vs Yes/No Questions	Value questions need ONE unique value; yes/no questions need a definite YES or definite NO -- either definite answer is sufficient.	For yes/no, a confident "NO, always" is sufficient; "sometimes yes, sometimes no" is insufficient.	"Is x > 3?" with (1) x = 5: sufficient YES. With x = 5 or 2: insufficient -- both answers possible.
150		Test Statements Individually First	Always evaluate (1) alone, then (2) alone, BEFORE combining; combining too early turns C-questions into E-failures.	Force yourself to answer "without (2)?" before letting (2) in.	(1) gives x = 4 or ?4, (2) alone gives x = 4 or 9 -- neither alone suffices; combined only 4? Check overlap! x = 4 -- sufficient together (C).
151		The C/E Trap	When neither statement alone suffices, ALWAYS check whether they work TOGETHER before picking E -- at least half of "insufficient" pairs combine into C.	Write the candidate sets from (1) and (2), then intersect them; one survivor = C, two survivors = E.	(1) x > 3; (2) x is even and < 10: together x ? {4, 6, 8} -- still three values -> E.
152		Plugging Numbers	Test statements with carefully chosen numbers: 0, 1, ?1, fractions, and negatives reveal whether a claim is really always true.	Build a "DS toolkit" of boundary numbers before exam day and cycle through them.	"Is x ² > x?" Try 2 (yes), 0 (no) -> not always; the statement is insufficient.
153		Don't Solve -- Determine	DS rewards judging sufficiency, not computing the answer; often you only need to know "this gives a linear equation in one unknown."	Count variables vs equations: solvable systems are sufficient, so announce "sufficient" and move on.	Two distinct linear equations in two unknowns -> unique solution -> sufficient without solving it.
154		Inequalities in DS	Inequality statements define RANGES; they're sufficient only when the range forces one definite answer to the stem question.	"Is x > 10?" with (1) x > 20 -> definite YES, sufficient. With (1) x > 5 -> maybe, insufficient.	Stem x > 10; (1) x > 20: sufficient. (2) x is between 5 and 15: sometimes yes, sometimes no -- insufficient.
155		Rephrasing the Stem	Rewrite the question in algebra before reading statements; "Is x an integer?" becomes "does x ? ??" and statements slot in cleanly.	Rephrase every stem; the 20 seconds pays back in every statement you evaluate.	"What is x ? y?" rephrases to "what is one expression?" -- statements giving x?y directly (not x and y) suddenly look sufficient.
156		Contradictory Statements	Official DS statements never contradict each other -- if yours seem to, you've misread a statement.	Re-read the words when (1) and (2) can't both be true; the error is usually yours.	(1) x = 5 and (2) x ² = 25: not a contradiction -- (2) allows ±5. Check again.
157		The "Both Together Give New Info" Case	Two insufficient statements can combine when their joint information eliminates the ambiguity each leaves open.	After testing alone, ALWAYS test the intersection before answering C or E.	(1) x + y = 10 (many pairs); (2) x ? y = 2 (many pairs); together -> one pair (x, y) = (6, 4) -> C.
158		Algebra DS -- Numbers of Equations	A unique solution needs as many independent equations as unknowns; redundancy (same equation twice) doesn't help.	Check independence: "x + y = 5" and "2x + 2y = 10" are the SAME equation in disguise.	(1) x + y = 5, (2) 2x + 2y = 10 -- together still insufficient (one equation, two unknowns).
159		The Zero Trap	Zero behaves differently: x ² ? 0 always, x ³ can be negative, and x = 0 breaks many "always positive" claims.	Whenever a statement allows x = 0, test it explicitly.	"Is x > 0?" (1) x ³ = 0 -> x = 0 -> definite NO -> actually sufficient (a definite no answers the question).
160		Percents & Ratios in DS	Percents need a base; ratios need an actual quantity to fix sizes. Statements giving only ratios rarely fix totals.	Ask "do I know the base/total?" before declaring sufficiency.	"Ratio of men to women is 2:3" -- without a total or one count, the headcount is unknown -> insufficient.
161		DS with Consecutive/Integer Constraints	The "x is an integer" constraint can turn an infinite set into a finite one -- a classic sufficiency driver.	When a statement narrows to a range, check how many integers the range contains.	"x is an integer between 2 and 5" -> {3, 4} -> still two values -> insufficient for "what is x?"
162		"Was the Question Answered?" Discipline	If the statement produces a definite answer -- even a negative or ugly one -- it is sufficient. Sufficiency ? "the answer I hoped for."	Judge sufficiency by information content, never by whether you like the result.	"Is x positive? (1) x = ?3" -> sufficient (the answer is NO, and NO is definite).
163		Common DS Wrong Patterns	Top traps: picking C when (2) alone works; picking E without checking overlap; treating "not always yes" as "no"; assuming two statements give different info.	After choosing, spend 5 seconds on the one alternative that could also be right.	Candidate picks C (together); quick recheck: does (2) alone give a unique answer? If yes, the answer is B.
164		DS in Practice Sets	The most efficient way to learn DS is official-format practice:		

Review misses with a written
"why": rephrase error, test

An error log entry: "picked E
but (1)&2 intersect

How to attack the 21 Quant questions: shortcuts, elimination, and the habits that protect accuracy under the clock.

#	Term	Key Facts	Strategy Tip	Example
165	No Calculator in Quant	Every Quant answer must be derived by hand using the scratch pad; the on-screen calculator exists only in Data Insights.	Practice mental math and clean longhand daily; handwriting errors are the #1 Quant scorer.	A candidate computes 17% of 2,400 as $0.17 \times 24 \times 100 = 408$ without reaching for a calculator.
166	The 2-Minute Budget	21 questions / 45 minutes ? 2 minutes 8 seconds each; a 3-minute question must be offset by three 90-second ones.	Track time in thirds: by question 7 you should be ~14 minutes in.	At 24 minutes elapsed, a candidate with 9 done is on track; with 6 done, they accelerate.
167	Back-Solving	When the answer choices are numbers, plug them into the question -- start from the middle choice (C or B) and adjust.	Back-solving works whenever the equation is annoying but the choices are tidy.	"Find x in $2x + 7 = 31$ ": choices 8/10/12/14 -- test 12 -> 31 .
168	Picking Numbers	Substitute friendly numbers for variables (2, 3, 10, 100) to turn abstract questions into arithmetic -- then map the answer back to variables.	Pick numbers that avoid special cases: avoid 0 and 1 unless testing boundaries.	"Which is largest: $a+b$, $2a$, a^2 ?" with $a = 3$, $b = 4$ -> 7, 6, 9 -> a^2 wins for these values; verify with $a = 0.5$ too.
169	Answer-Choice Elimination	Wrong choices are usually built from common mistakes -- miscomputed signs, wrong base, or swapped numbers -- so the right answer often "stands out" by process of elimination.	Before solving fully, eliminate choices that can't satisfy the stem's condition (parity, size, units).	A stem demanding an even result eliminates all odd choices in one glance.
170	Estimation & Bounds	Rough answers bound the choices; rounding both factors the same direction keeps the estimate honest.	Get the magnitude right first (tens, hundreds), then refine.	$(2,998 \times 1,010) ? 3,000 \times 1,000 = 3,000,000$; only one answer sits near it.
171	Dimensional Analysis	Track units through every calculation: miles per hour $\times$ hours = miles; the units tell you which operation to use.	Write units beside numbers in scratch work -- canceled units verify the formula.	$60 \text{ mph} \times 2.5 \text{ h} = 150 \text{ mi}$; units cancel to miles, confirming the setup.
172	Fraction-to-Decimal Benchmarks	Know the common conversions cold: $1/2=.5$, $1/3?.333$, $1/4=.25$, $1/5=.2$, $1/8=.125$, $1/6?.167$, percents ? fractions.	Convert in whichever direction makes the arithmetic easier -- benchmarks make both instant.	$37.5\% = 3/8$: "12.5% of 320" becomes $1/8 \times 320 = 40$.
173	Percent Shortcuts	10% moves the decimal; 5% = half of 10%; 1% = two places. Stack these instead of multiplying decimals.	For "18% of 250," compute $10\% + 5\% + 3(1\%) = 25 + 12.5 + 7.5 = 45$.	8% of 4,500 = $8 \times 45 = 360$ (shift the decimal once, multiply by the percent).
174	Ratio Manipulation	Scale ratios up before computing; if a ratio is 3:4, use coefficients 3k and 4k so the numbers stay integer-clean.	Introduce k and solve for k from any total or difference given.	Ratio 3:4 with a difference of 5 -> $k = 5$ -> the parts are 15 and 20.
175	Answer-Every-Question Rule	Unanswered Quant questions count as incorrect, and there is no penalty for wrong answers -- a guess is always better than a blank.	Never leave a question empty; with seconds left, fill in a pattern or your best guess.	A candidate with 40 seconds left and 3 questions open guesses all three instead of finishing one.
176	Scratch-Pad Organization	The wet-erase pad is your workspace: number each problem, write clean steps, and cross out worked ones so you can track what you've done.	One problem per pad section -- never reuse space that could hold your error.	A candidate's pad shows columns per question; on question 15 they flip to a fresh area to keep steps clean.
177	The Flag-and-Return Strategy	A flagged question you skip comes back at the end; mark it, note one answer, and move on to protect the clock.	Flag only after a real 60-second attempt, not out of fear -- fear-flags multiply.	At question 12 a candidate is stuck; he flags, guesses, finishes the section with 4 minutes to spare, and returns to it.
178	Warm-Up Routine	The first Quant questions feel harder because your brain is cold; a 2-minute warm-up before the exam (simple arithmetic, one easy algebra problem) primes the engine.	Do your warm-up during the tutorial/check-in windows when allowed, on scratch paper.	A candidate runs through 5×17 , 12^2 , a percent problem, and a factoring quickie while waiting for the section to start.

Part 12: Test-Day Logistics & Rules (14 Concepts)

What actually happens at the center (or online): check-in, materials, breaks, review-and-edit, cancellation, and rescheduling -- know it so nothing surprises you.

#	Term	Key Facts	Strategy Tip	Example
179	Test Center Check-In	Arrive ~30 minutes early with valid, unexpired government-issued ID matching your registration name exactly; you'll be photographed, fingerprinted, and sign a confidentiality statement.	Book your slot, then triple-check the name on your ID matches your mba.com profile before exam day.	A candidate with a driver's license "Rob Smith" vs registration "Robert Smith" risks being turned away -- fix profile mismatches early.
180	Lockers & Personal Items	Phones, watches, bags, and notes stay in a locker during the exam; only ID and the provided materials go to the workstation.	Wear layers and leave valuables at home; nothing you need mid-exam should live in the locker.	A candidate's smartwatch pings during the exam -- proctors confiscate it and the test continues.
181	The Scratch Pad	The center provides a laminated erasable scratch pad and marker (no personal paper or pens); you can request a replacement pad during the test.	Ask for a fresh pad before the DI section if your pad is crowded -- the check costs seconds.	Mid-exam, a candidate's pad is full of work; they raise a hand, swap for a clean pad, and continue.
182	The One Optional 10-Minute Break	The current exam allows up to ONE optional 10-minute break; it does not count inside the 2h15m of testing time.	Plan WHEN you'll take it (between sections 1-2 or 2-3) during your mocks, and keep it short.	A candidate takes the break between Quant and Verbal: bathroom, water, 6 deep breaths, back in under 7 minutes.
183	Section Order Selection	At the start you choose the order of the three sections (e.g., Verbal -> Quant -> DI); the choice is yours each time you take the exam.	Run your chosen order in every mock so exam day feels identical -- consistency beats last-minute invention.	A candidate who performs best fresh on Verbal always opens with Verbal, then Quant, then Data Insights.
184	Review & Edit (Up to 3 Answers)	At the end of each section you can review your answers and change up to THREE of them before finalizing that section.	Use the review screen to recheck flagged questions only -- blind rewriting costs accuracy.	A candidate reviews and swaps one flagged guess after a 30-second re-derivation; the other two flags stay.
185	The Non-Disclosure Agreement	Before the exam you must accept an NDA covering test content and materials; violating it can void scores or block future testing.	Never share question specifics (even with a tutor) -- fresher questions keep the test fair.	A candidate who relays a remembered question to a forum risks account and score cancellation.
186	Unofficial Score & Cancel Option	When you finish, you see an unofficial score preview; you can accept it, cancel it, or (policy-permitting) revisit the decision within a short window per mba.com rules.	Decide your personal cancel policy in advance (e.g., "cancel below 630") so emotion doesn't decide.	A candidate sees 545, below their floor, cancels on the spot, and rebooks after targeted study.
187	Reinstating a Canceled Score	Per mba.com policy, a canceled GMAT score can be reinstated within 60 days for a fee -- after that it's gone.	Before canceling, confirm the current reinstatement fee and window on mba.com; the rules are periodically updated.	A candidate who canceled in panic pays the reinstatement fee two weeks later once they confirm the score is actually usable.
188	Official Score Report Timing	Your official score report becomes available in your mba.com account within a short period (typically a few business days); schools receive electronic reports you authorize.	Check the current published timing on mba.com -- and order extra reports well before deadlines.	A Friday test yields a report in the account by the following Wednesday; the candidate sends it to a school with a Monday deadline safely ahead.
189	Rescheduling & Fees	You can reschedule or cancel an appointment through mba.com, subject to deadlines and fees that increase as the test date nears; very-late changes forfeit more of the fee.	Lock your date early, then move it only with a clear reason -- the fee math rarely favors last-minute changes.	Moving a test from 5 days out costs a hefty change fee; moving 30+ days out costs little or nothing.
190	Score Sending	You choose which programs receive your score report; you have the option to review your score before sending (the score-choice feature), so no school sees a score you choose not to send.	Research each school's GMAT average and deadlines, and send only to programs that fit your target band.	A candidate targets three schools, sees 685 at the end, and instantly sends the report to all three free-of-charge at the center.
191	Accommodations	Candidates with documented disabilities can request testing accommodations (extended time, breaks, accessible formats) through mba.com's accommodations process with supporting documentation.	Start the accommodations request EARLY -- approval takes time, and the window closes before your appointment.	A candidate with ADHD submits documentation 6 weeks ahead and receives 50% extended time.
192	The Five-Attempt Frame	All your attempts within any rolling 12 months count toward the maximum of 5, and		

attempts must be ?16 days
apart -- a wasted attempt
consumes budget.

Never sit "just to see"; each
attempt is a scored data point
that counts against your

A candidate takes 4 tests by March, leaving 1 attempt for the rest of the rolling year --

What your score means to schools, how to target a program, and how to use the score-choice and retake system strategically.

#	Term	Key Facts	Strategy Tip	Example
193	No Pass/Fail -- Ever	The GMAT has no passing score; each program independently decides what range it expects, factoring the score with GPA, essays, recommendations, and experience.	Don't chase a mythical "passing line" -- chase the band your target program actually admits.	Two schools may both "require" a GMAT, yet one averages 650 and the other 710 among admitted students.
194	7,700+ Programs, ~2,400 Schools	More than 7,700 programs at roughly 2,400 graduate business schools worldwide accept the GMAT for admission decisions.	Use the official program finder on mba.com to see which of your targets require or accept the GMAT.	An applicant to a Master of Accountancy program confirms the school accepts GMAT scores on its admissions page before registering.
195	Score Bands & Ranges	Programs publish ranges or averages (e.g., middle 80% band); a score inside or above the band is competitive, below is a hill to climb.	Calculate where your practice scores sit against each target school's band before applying.	A school's middle-80% band of 620-710 tells a 660-scorer they're solidly competitive.
196	Percentiles Move	Percentile rankings are recomputed with new-score-year data, so a fixed total maps to different percentiles over time.	Compare with the CURRENT concordance table on gmac.com/mba.com, not a number from an old blog.	A 700 in one cohort may rank 94th percentile; after a stronger cohort, the same 700 may rank 92nd.
197	Sending Scores Strategically	With the score-choice feature you see your unofficial score before choosing recipients, so schools receive only scores you approve.	Prepare a recipient list in advance (up to 5 per attempt at no extra charge at the center, per current policy -- verify on mba.com), and add others later for a fee.	A candidate with a target list of 4 schools and a 675 result approves the send to all 4 on the spot.
198	The Retake Decision	Retake when a targeted improvement is realistic (usually a 40-80 point gain after real study), not after two weeks of hoping.	Set a score floor AND a study-hours gate: "no retake until I've logged 40 focused hours since the last attempt."	A 640-scorer with 8 weeks to deadlines and a 680 target retakes after 50 hours of official-set work -- and hits 670.
199	When to Take the Exam	Reverse-engineer from deadlines: score validity is 5 years, schools' rounds run Sep-Apr, and peak testing windows fill early.	Register 2-3 months before your first target deadline so a retake still fits the calendar.	A Round-1 deadline of October 10 means testing by mid-August leaves room for a September retake.
200	Combining with Your Profile	Schools weigh GMAT with GPA, work experience, essays, and interviews -- a strong profile can offset a mid-range score and vice versa.	Be honest with yourself about which lever you can move fastest; usually it's the score.	A candidate with a 3.2 GPA and 5 years of strong work history moves the GMAT from 600 to 650 rather than chasing a 3.5 retroactive GPA.
201	Test-Required vs Test-Optional	Many schools still require GMAT/GRE for admission or scholarships; others are test-optional but may prefer a score for merit aid.	Check the CURRENT policy on each school's official admissions page -- policies change year to year.	A program that went test-optional in 2024 still uses scores for fellowship consideration; a 690 keeps that candidate in the aid pool.
202	Score Report Contents	The official report shows your total, three section scores, percentiles, and test date; schools see the same report you do.	Make sure every section score tells your story -- a lopsided report (high Quant, low Verbal) invites questions, so balance matters.	A 90th-percentile Quant with 40th-percentile Verbal prompts an M7 screener to look closely at the rest of the file.

Part 14: The Online (At-Home) Exam (8 Concepts)

The GMAT Online option -- proctoring, environment, and the specific rules that differ from test centers.

#	Term	Key Facts	Strategy Tip	Example
203	GMAT Online Option	The GMAT can be taken at home with live remote proctoring, alongside the traditional test-center route; availability and eligibility rules are set by GMAC and may vary by region.	Run the system check and verify availability in your country on mba.com well before booking.	A candidate with no Pearson center within 200 miles books the online exam for a Saturday morning slot.
204	Online Environment Rules	The room must be private, quiet, well-lit, and free of prohibited items (notes, phones, posters with text); you scan the room with your webcam before starting.	Do a "samurai sweep": clear the desk, close apps, silence devices, and lock the door -- do it in a dry run first.	A candidate whose wall poster contains text is asked to remove it or reschedule -- the scan catches it.
205	Live Proctors & Monitoring	A human proctor watches you via webcam for the whole		

Keep your eyes on the monitor, hands visible, and never read

206	GMAT Study Guide	The Online Whiteboard	In the online exam you use an on-screen whiteboard tool instead of a physical scratch pad; no personal paper is allowed at any point.	Practice timing yourself with the whiteboard tool (or a tablet in "whiteboard mode") before exam day -- its layout differs from paper.	A candidate who drafted all mocks on paper finds the mouse-driven whiteboard slower; one dedicated practice session fixes it.
207		System Requirements	The online exam needs a working webcam, microphone, stable internet, and a supported operating system/browser; GMAC publishes exact requirements.	Test camera, audio, and connection the day before AND two hours before the appointment; restart your machine before the session.	A candidate's laptop update breaks the browser mid-test; the mba.com system check two hours early catches it in time to switch machines.
208		Breaks & Time in the Online Exam	The same single optional 10-minute break applies online; the on-screen timer pauses for the break, but proctors may verify your return.	Stay within the break window and re-show your workspace to the camera on return.	A candidate takes the optional break, returns at 8 minutes, and the proctor confirms the room before the section resumes.
209		Rescheduling Online Exams	Online appointments follow their own rescheduling rules and cutoffs on mba.com; last-minute online changes may forfeit the full fee.	Compare online vs center cancellation windows before booking -- the cheaper-to-move option might be worth the drive.	A candidate books online for flexibility but learns center seats allow cheaper reschedules; they switch for a mid-term plan.
210		Online vs Test Center Choice	Choose based on your setup: test centers give a physical scratch pad and a controlled environment; online removes travel but adds tech risk and whiteboard friction.	Take a full mock in YOUR chosen mode, with identical logistics -- including the whiteboard or pad -- before deciding.	A candidate who mocks online twice with the whiteboard and stable connection stays remote; the center-phobic choice is validated by data.

Part 15: Mental Math, Pacing & Focus (12 Concepts)

The in-the-moment skills that convert knowledge into a score: arithmetic fluency, time per question, and state management.

#	Term	Key Facts	Strategy Tip	Example
211	Mental Arithmetic Fluency	The exam rewards instant recall of times tables, squares (11^2 - 25^2), percents, and fraction conversions -- the building blocks of every Quant step.	Drill 10 minutes daily: squares to 25^2 , common percents, 1/2-1/12 decimal equivalents.	$17^2 = 289$ and $12.5\% = 1/8$ are instant -- no computation stops the flow mid-question.
212	The 45-Minute Section Clock	Each section is exactly 45 minutes; run each mock section with a hard stop at 45:00, replicating real conditions and anxiety.	Check the clock at thirds: by question 7/8 (Quant) you should be ~15 minutes in.	A Quant section at 20 minutes with 10 done is exactly on budget; at 8 done, the candidate accelerates.
213	The 2-Minute Rule	If a single question exceeds 2 minutes without progress, guess-and-flag; a one-question victory is not worth three later losses.	Set a personal alarm habit: when you catch yourself re-reading a stem for the third time, flag and move.	A candidate re-derives a quadratic twice, picks B (best guess), flags, and returns only if time remains.
214	Reading Speed for Verbal & DI	Verbal and DI reward fast, accurate reading: practice timed passages and data memos to lift words-per-minute without losing comprehension.	Do 10-minute daily "speed reads" of business/argument articles, then summarize out loud in one sentence.	A candidate reads a 220-word RC passage in 90 seconds with a 5-word map per paragraph -- room left for questions.
215	Anxiety & the First Question	The exam's first question sets a tone, not a destiny; candidates who over-focus on it lose more to nerves than difficulty.	Breathe, read the first question twice if needed, and treat it as just another item.	A wobbly candidate answers Q1 in 3 minutes but steadies by Q3 and finishes on time -- the slow start cost nothing.
216	The Warm-Up Ritual	A brief warm-up before each section (simple arithmetic, one CR argument sketch) primes the specific muscles that section uses.	Between sections, do a tiny warm-up instead of doom-scrolling the clock.	Before Verbal, a candidate silently maps a 4-sentence argument (premise/conclusion) as brain-prime.
217	Hydration & Fuel	Blood sugar and hydration affect focus directly; long tests punish skipped meals and sugary spikes.	Eat a balanced meal 2-3 hours before, bring water (locker/desk rules permitting), and use the break for a small snack.	A candidate who skips breakfast hits a 2:00 PM dip in Verbal; the disciplined one eats oats + eggs and stays steady.
218	Sleep Before the Exam	Cramming the night before costs more than it gains; a full night's sleep is the single best last-minute prep.	End serious study 24 hours before the test; the final evening is light review and an early bed.	Two equally prepared candidates differ only in sleep: 8.5 hours vs 4 -- the rested one scores 40 points higher, per classic study lore and general practice wisdom.
219	The 72-Hour Taper	The last three days: light content review, one timed section per day, no new material, no full-length mocks the day before.	Trust your accumulated reps -- the taper locks in confidence, not knowledge.	A candidate does a timed Quant section on day ?3, Verbal on ?2, and an exam-day dry run list on ?1.

220	GMAT Study Guide	Error Log Review	A written error log (question, error type, fix) converts practice into improvement; Guessing ? reviewing.	Review the log every 2-3 days and target your TOP error class first.	A log shows 40% of misses are DS "combined vs single" misreads -- the next three sessions drill exactly that.
221		The Stop Rule	There is a point in every study session where further reps decay in value; stopping clean beats grinding into mud.	Timebox sessions (45-90 min) and end with a 5-minute reflection: what stuck, what's next.	A candidate closes a 90-minute DI session with "multi-source tabs = read order issue" written in the log -- the next session opens there.
222		Simulation Is the Test	Mocks should mirror the real conditions: same section order, same break, same timing, same scratch tool -- never "loose" practice sessions.	Book mocks at the same time of day as your real test for two weeks before exam day.	A morning-test candidate shifts all mocks to 9:00 AM so peak focus lands when the real exam will run.

Part 16: 30-Day Study Plan & Final Checklist (10 Concepts)

The path from wherever you are to test day: a month of structured prep and the final checklist that prevents day-of disasters.

#	Term	Key Facts	Strategy Tip	Example
223	Diagnostic Before Anything	Start with one timed full-length official mock to set a baseline across all three sections -- guessing scores are fine as a baseline, not as a verdict.	Record baseline totals AND section splits; the plan below adapts to your weakest section.	A baseline of 560 (Q31, V28, DI22) sets a target of +90 over the month, weighted toward the DI deficit.
224	Week 1 -- Content Foundation	Days 1-7: close content gaps in arithmetic, algebra, RC structure, and DI formats using Parts 2-10 of this guide, 60-90 minutes daily.	Fill gaps in the order the exam weights them: Quant and DI first, Verbal next.	A candidate with rusty algebra spends 4 of the first 7 days on Parts 3-6 before touching full sets.
225	Weeks 2-3 -- Targeted Drills	Days 8-21: timed sets by skill -- 15 Quant, 15 Verbal, 10 DI per session -- with an error log after each set.	Alternate between your weakest skill and your strongest to protect both; never drill only your favorite.	DI-deficient candidate runs DS 10-item sets four evenings a week while maintaining CR sets twice a week.
226	Weekly Full-Length Mock	One timed full exam per week, same section order and break as the real test; log the score and the section-time overruns.	Review each mock in full the next day -- rebuilding every miss beats taking more tests.	Mock scores 560 -> 590 -> 615 across three weeks; the trend line, not any single test, steers the final week.
227	The Official Starter Kit	GMAC's free Official Starter Kit (and the free official question banks it unlocks) are the closest thing to real questions; independent books vary in fidelity.	Do ALL official free questions before touching paid third-party sets; official first, always.	A candidate runs the free official Quant set and discovers their "trick question" instincts misfire -- recalibrating to official wording.
228	Week 4 -- Test-Ready Taper	Days 22-30: one timed section daily, light review, logistics rehearsals (check-in, break, scratch tool), and NO new material after day 27.	Rehearse the exam-day script: wake time, route/tech check, breakfast, arrival buffer.	A candidate simulates the morning: 7:00 alarm, 8:00 tech check, 8:30 arrival -- the real day feels like a rerun.
229	The Error-Log Loop	Every miss gets one line: what I did, what I should have done, what rule to review; 50 logged misses beat 500 unflagged ones.	Review the log every 2-3 days; convert 2 patterns per week into flashcards.	"DS: chose E without intersecting" logged three times becomes a flashcard: "Always intersect (1)?(2) before E."
230	Exam-Day Checklist	Night before: ID, registration printout, route/tech test, alarm x2, clothes, water, breakfast plan. Morning: tech check, arrival buffer, NDA readiness, warm-up plan.	Run the list the night before and AGAIN at breakfast; checklists beat memory under adrenaline.	A candidate's checklist catches a lapsed ID at breakfast -- 90 minutes of buffer makes the DMV detour survivable.
231	Post-Exam Decision Script	After the score preview, follow YOUR pre-written script: accept/send per your target list, cancel per your floor, or pause before deciding if the policy window allows.	Pre-write the script in Week 4: "? target: accept + send to all 4; below floor: cancel + rebook after 40 hours."	A 648 result vs a 650 floor triggers the script: accept (within 2 points = noise), send to all four, celebrate.
232	Score Sending & Follow-Up	Send reports to schools per the score-choice flow, download your official PDF for your records, and note the 5-year validity date for future applications.	File the official report where your applications live; re-check each school's self-reported score section during application.	A candidate saves the official report PDF and the 5-year expiration (2025 -> 2030) into their application folder on day one.