

QUANT DAILY

Free GRE Quant Sample

30 timed GRE-style quant questions across 6 core topics — each with a method page, the exact target time, and a full worked solution.

30 questions

6 topics

Easy → Hard

Worked solutions

Free sample · 2026 · Share it freely

Quant Daily is independent GRE-style practice — not affiliated with ETS or GMAC.

quantdaily.app

How to use this sample

Each topic opens with **the method** — the fast route through that question type — and **the trap** that costs people the most time. Then 5 questions, easy to hard.

Every question carries a **target time**. That is not an editorial guess: it is the per-question clock the Quant Daily app enforces for that topic and difficulty. Getting a question right in triple the time is still a miss on test day.

1. Start a timer. Work the question; commit to an answer before you check.
2. Check the worked solution at the back — even when you were right. The shorter method is the one that survives the clock.
3. Note which topics you missed *on time*, not just which you got wrong. Those are tomorrow's drills.

Every question is **generated and checked by the same engine that runs the Quant Daily app**: each has exactly one correct answer, computed from the printed numbers, and the wrong options are built from the slips the topic invites.

Want these against a live clock? A fresh timed drill is free every day at quantdaily.app — no account needed.

Quantitative Comparison

THE METHOD

- Four fixed answers: A is greater, B is greater, they are equal, or it cannot be determined.
- Simplify both quantities the same way — add or subtract the same term, or multiply by the same positive number — until one side is easy to read.
- When a variable is present, test values that behave differently: 0, 1, a negative, a fraction. Two cases with different outcomes means (D).

The trap: Choosing (D) when both quantities are plain numbers. With no variable, the relationship is always determined — compute it.

1**EASY****Target 75s**

Quantity A: distance at 30 units per hour for 5 hours

Quantity B: 150

Compare Quantity A and Quantity B.

- | | |
|--|--|
| A Quantity A is greater. | B Quantity B is greater. |
| C The two quantities are equal. | D The relationship cannot be determined from the information given. |

2**MEDIUM****Target 75s**

Quantity A: x , where x is a positive integer

Quantity B: 4

Compare Quantity A and Quantity B.

- | | |
|--|--|
| A Quantity A is greater. | B Quantity B is greater. |
| C The two quantities are equal. | D The relationship cannot be determined from the information given. |

3

MEDIUM

Target 75s

Quantity A: 15^2

Quantity B: 240

Compare Quantity A and Quantity B.

- A** Quantity A is greater.
- B** Quantity B is greater.
- C** The two quantities are equal.
- D** The relationship cannot be determined from the information given.

4

HARD

Target 75s

Quantity A: $|x - 5|$, where x is a real number

Quantity B: 3

Compare Quantity A and Quantity B.

- A** Quantity A is greater.
- B** Quantity B is greater.
- C** The two quantities are equal.
- D** The relationship cannot be determined from the information given.

5

HARD

Target 75s

Quantity A: $4x + 5$, where x is a positive numberQuantity B: $4x$, for the same x **Compare Quantity A and Quantity B.**

- A** Quantity A is greater.
- B** Quantity B is greater.
- C** The two quantities are equal.
- D** The relationship cannot be determined from the information given.

Integers, Exponents & Number Properties

THE METHOD

- Prime-factorize first. Divisors, multiples, GCF and LCM all read straight off the factorization.
- Counting multiples in a range: $\lfloor \text{last} \div k \rfloor - \lfloor (\text{first} - 1) \div k \rfloor$. "Divisible by a but not b" = multiples of a minus multiples of $\text{lcm}(a, b)$.
- $|x - a| < r$ means x is within r of a: $a - r < x < a + r$.

The trap: Forgetting that 1 is not prime, or that "inclusive" adds the endpoint.

6

EASY

Target 90s

When 52 is divided by 5, what is the remainder?

- | | |
|------------|-------------|
| A 2 | B 5 |
| C 3 | D 10 |
| E 4 | |

7

MEDIUM

Target 105s

How many positive odd factors does 516 have?

- | | |
|------------|-------------|
| A 7 | B 12 |
| C 4 | D 8 |
| E 5 | |

8

MEDIUM

Target 105s

What is the value of 12^3 ?

- | | |
|---------------|---------------|
| A 1728 | B 2197 |
| C 1331 | D 1584 |
| E 1872 | |

9

HARD

Target 120s

$$|x - 8| < 4$$

What is the greatest integer x that satisfies the inequality?

A 13

B 4

C 11

D 21

E 12

10

HARD

Target 120s

$$n = 220.$$

What is the largest integer divisor of 220 that is at most 20?

A 22

B 40

C 10

D 220

E 20

Algebra, Equations & Functions

THE METHOD

- Look for what the question asks — often $x + y$ or $x - y$ — and add or subtract equations to get it directly.
- Quadratics: factor into two numbers whose product is the constant and whose sum is the middle coefficient.
- Composite functions work inside out: $(f \circ g)(2)$ means compute $g(2)$ first.
- Multiplying or dividing an inequality by a negative number flips its direction.

The trap: Forgetting to flip the inequality sign after dividing by a negative.

11

EASY

Target 90s

The sum of two numbers is 20 and their difference is 10.

Let x be the larger and y the smaller.

What is the larger number?

A 15

B 16

C 5

D 10

E 20

12

MEDIUM

Target 105s

The product of two consecutive positive integers is 72.

What is the larger integer?

A 72

B 9

C 8

D -9

E -8

13

MEDIUM

Target 105s

$$f(x) = 2x + 2$$

What is $f^{-1}(18)$?

A 18

B 8

C 38

D 10

E 9

14

HARD

Target 120s

$$-4x + 12 \geq 4$$

What is the greatest integer x that satisfies the inequality?

A 3

B 4

C 1

D 2

E 7

15

HARD

Target 120s

$$x \star y = x^2 + 2y$$

What is $-1 \star (1 \star -2)$?

A -5

B -2

C -7

D -6

E -8

Percents, Ratios & Mixtures

THE METHOD

- Percent change = $\text{change} \div \text{original}$. The base is always the value you started from.
- Successive changes multiply: up 20% then down 20% is $1.2 \times 0.8 = 0.96$, a 4% fall — not zero.
- A ratio $a:b$ means parts; the total is $a + b$ parts. Find one part, then scale.
- Averages are totals in disguise: $\text{total} = \text{average} \times \text{count}$.

The trap: Adding successive percent changes instead of multiplying them.

16

EASY

Target 90s

What is 50 percent of 60?

- | | |
|--------------|-------------|
| A 30 | B 31 |
| C 36 | D 40 |
| E 300 | |

17

MEDIUM

Target 105s

The ratio of Morgan to Casey is 2:5.

The ratio of Casey to Avery is 2:5.

What is the ratio of Morgan to Avery?

- | | |
|---------------|---------------|
| A 4:23 | B 4:25 |
| C 25:4 | D 2:5 |
| E 4:27 | |

18

MEDIUM

Target 105s

The average of 6 numbers is 48. Five of them average 50.

What is the missing number?

- | | |
|-------------|-------------|
| A 41 | B 46 |
| C 38 | D 39 |
| E 40 | |

19

HARD

Target 120s

A solution has concentrate and water in the ratio 4:1.

8 liters of water are added.

The original mixture is 20 liters.

What is the new concentrate-to-water ratio?

A 4:1

B 4:3

C 2:1

D 16:11

E 4:9

20

HARD

Target 120s

An investment of \$120,000 earns interest for 2 years at 20% per year.

By how much does the compound interest exceed the simple interest?

A 9600

B 4800

C 1200

D 4798

E 48000

Statistics, Counting & Probability

THE METHOD

- Sort the data before you look for the median; with an even count, average the middle two.
- Probability = favorable ÷ total for equally likely outcomes. "At least one" is fastest as $1 - P(\text{none})$.
- People who must sit together: glue them into one block, arrange the blocks, then arrange inside the block.
- Three overlapping sets: total = $A + B + C - (\text{pairs}) + (\text{all three}) + (\text{none})$.

The trap: Treating the sums of two dice as equally likely — count the 36 ordered outcomes.

21

EASY

Target 90s

The data set is 6, 6, 6, 8, 9, 5.

What is the mode?

A 3

B 6

C 1

D 8

E 4

22

MEDIUM

Target 105s

A bag contains 3 red, 3 blue and 4 green balls.

One ball is drawn at random.

What is the probability that it is red?

A $2/5$ B $7/10$ C $3/7$ D $3/10$ E $1/10$

23

MEDIUM

Target 105s

Consider all arrangements of the letters of the word "HOUSE".

How many distinct arrangements are there?

A 132

B 25

C 24

D 110

E 120

24

HARD

Target 120s

In a group of 37 people, 17 are in A, 19 are in B, and 17 are in C.

7 are in both A and B, 6 in both A and C, 7 in both B and C, and 2 are in all three.

Each "both" count includes the people who are in all three groups.

How many people are in at least one of the three groups?

A 33

B 37

C 2

D 53

E 35

25

HARD

Target 120s

A normal distribution has mean 40 and standard deviation 5.

Approximately what percent of the distribution lies between 40 and 45?

A 5

B 34

C 68

D 16

E 50

Geometry & Coordinate Geometry

THE METHOD

- Circle: circumference $2\pi r$, area πr^2 . Read which one is asked before you compute.
- Slope = rise $\div$ run. The x-intercept is where $y = 0$.
- Distance between points: $\sqrt{(\Delta x)^2 + (\Delta y)^2}$ — often a 3-4-5 or 5-12-13 triangle.

The trap: Using the diameter where the formula wants the radius.

26

EASY

Target 90s

A triangle has angles of 50° and 60° .

What is the third angle, in degrees?

- | | |
|--------------|--------------|
| A 62 | B 110 |
| C 130 | D 90 |
| E 70 | |

27

MEDIUM

Target 105s

The line has equation $y = 3x + 5$.

What is the x-intercept?

- | | |
|-----------------|----------------|
| A 3 | B $5/3$ |
| C $-5/3$ | D -2 |
| E 5 | |

28

MEDIUM

Target 105s

A right triangle has legs 6 and 8.

What is the perimeter?

- | | |
|-------------|-------------|
| A 39 | B 24 |
| C 10 | D 34 |
| E 48 | |

29

HARD

Target 120s

Point A is (3, -3) and point B is (0, 3).

What is the distance between A and B?

A 6

B 3

C $3\sqrt{3}$ D $2\sqrt{11}$ E $3\sqrt{5}$

30

HARD

Target 120s

Point P is (0, 3) and point Q is (6, 3).

What is the distance between the two points?

A 12

B 7

C 8

D 4

E 6

Worked solutions

1 Quantitative Comparison · Easy

Answer: **C) The two quantities are equal.**

1. Distance = $30 \times 5 = 150$.
2. Quantity A = 150. Quantity B = 150.
3. QC strategy · Simplify: Evaluate both quantities before you compare. Different-looking expressions are often equal — that is C, not D.

2 Quantitative Comparison · Medium

Answer: **D) The relationship cannot be determined from the information given.**

1. x can be less than, equal to, or greater than 4.
2. No further restriction is given.
3. QC strategy · When to pick D: Try two legal values of the unknown. If the comparison flips, the answer is D.

3 Quantitative Comparison · Medium

Answer: **B) Quantity B is greater.**

1. Use $(a - b)^2$: $(20 - 5)^2 = 400 - 200 + 25 = 225$.
2. Quantity A = 225. Quantity B = 240.
3. QC strategy · Simplify: Evaluate both quantities before you compare. When Quantity B is greater, the answer is B — not D, and not C just because the expressions look different.

4 Quantitative Comparison · Hard

Answer: **D) The relationship cannot be determined from the information given.**

1. $|x - 5|$ is 0 at $x = 5$, 3 at $x = 5 \pm 3$, and larger farther away.
2. The relation is not fixed.
3. QC strategy · When to pick D: Try two legal values of the unknown (and a fraction if x can be). If the comparison flips, the answer is D.

5 Quantitative Comparison · Hard

Answer: **A) Quantity A is greater.**

1. $(4x + 5) - 4x = 5 > 0$ for every x .
2. Quantity A is greater for every legal x .
3. QC strategy · Simplify: An unspecified x is not D when the difference is a constant. Subtract the quantities first.

6 Integers, Exponents & Number Properties · Easy

Answer: **A) 2**

1. $52 = 5 \times 10 + 2$.
2. Remainder: 2.

7 Integers, Exponents & Number Properties · Medium

Answer: **C) 4**

1. $516 = 2^2 \times 3 \times 43$.
2. Odd factors ignore the prime 2. That leaves 4.

8 Integers, Exponents & Number Properties · Medium

Answer: **A) 1728**

1. $12^3 = 12^2 \times 12 = 144 \times 12 = 1728$. (Exam-standard cube — worth memorising to 15^3 .)

9 Integers, Exponents & Number Properties · Hard

Answer: **C) 11**

1. Strictly between 4 and 12, endpoints out.
2. Integers: 5, 6, 7, 8, 9, 10, 11.
3. Greatest: 11.

10 Integers, Exponents & Number Properties · Hard

Answer: **E) 20**

1. $220 = 20 \times 11$, so 20 divides 220.
2. 20 is the largest integer ≤ 20 that still divides 220.

11 Algebra, Equations & Functions · Easy

Answer: **A) 15**

1. $x + y = 20$, $x - y = 10$.
2. $2x = 30 \rightarrow x = 15$, $y = 5$.

12 Algebra, Equations & Functions · Medium

Answer: **B) 9**

1. $n(n+1) = 72$.
2. The integers are 8 and 9.

13 Algebra, Equations & Functions · Medium

Answer: **B) 8**

1. $y = 2x + 2 \Rightarrow 2x = 16 \Rightarrow x = 8$.
2. Check: $f(8) = 18$.

14 Algebra, Equations & Functions · Hard

Answer: **D) 2**

1. $-4x \geq 4 - 12 = -8$.
2. Divide by -4 and reverse the inequality: $x \leq 2$.
3. Greatest integer x is 2.

15 Algebra, Equations & Functions · Hard

Answer: **A) -5**

1. The stem defines $x \star y = x^2 + 2y$.
2. $(1 \star -2) = -3$, then $-1 \star \text{that} = -5$.

16 Percents, Ratios & Mixtures · Easy

Answer: **A) 30**

1. 50% is $\frac{1}{2}$ — so take $\frac{1}{2}$ of 60: 30.

17 Percents, Ratios & Mixtures · Medium

Answer: **B) 4:25**

1. Align Casey's term: LCM of 5 and 2 is 10.
2. Morgan:Casey becomes 4:10. Casey:Avery becomes 10:25.
3. Morgan:Avery = 4:25 $\rightarrow$ 4:25.

18 Percents, Ratios & Mixtures · Medium

Answer: **C) 38**

1. All 6 together total $6 \times 48 = 288$.
2. The 5 known numbers total $5 \times 50 = 250$.
3. Missing number = $288 - 250 = 38$.

19 Percents, Ratios & Mixtures · Hard

Answer: **B) 4:3**

1. Original: 16 concentrate/milk and 4 water.
2. Add 8 water $\rightarrow 16 : 12$.
3. Reduce: 4:3.

20 Percents, Ratios & Mixtures · Hard

Answer: **B) 4800**

1. Simple interest = $\$120,000 \times 20 \times 2 \div 100 = \$48,000$.
2. Compound interest = $\$120,000 \times [(1 + 20/100)^2 - 1] = \$52,800$.
3. Difference = $\$52,800 - \$48,000 = \$4,800$. (Shortcut: $P \times (R/100)^2$ gives the same.)

21 Statistics, Counting & Probability · Easy

Answer: **B) 6**

1. 6 appears three times; every other value appears once.

22 Statistics, Counting & Probability · Medium

Answer: **D) 3/10**

1. Total balls = 10; favourable (red) = 3.
2. $P(\text{red}) = \text{favourable} \div \text{total} = 3/10 = 3/10$.

23 Statistics, Counting & Probability · Medium

Answer: **E) 120**

1. All 5 letters of "HOUSE" are different, so every ordering is distinct.
2. Arrangements = $5! = 120$.

24 Statistics, Counting & Probability · Hard

Answer: **E) 35**

1. $|A \cup B \cup C| = |A| + |B| + |C| - |A \cap B| - |A \cap C| - |B \cap C| + |A \cap B \cap C|$.
2. $17 + 19 + 17 - 7 - 6 - 7 + 2 = 35$.

25 Statistics, Counting & Probability · Hard

Answer: **B) 34**

1. Empirical rule: approximately 68% of a normal distribution lies within 1 SD of the mean and approximately 95% within 2 SD; the curve is symmetric about the mean.
2. 40 to 45 is one side of the ± 1 SD band: half of 68% $\approx 34\%$.

26 Geometry & Coordinate Geometry · Easy

Answer: **E) 70**

1. Angles in a triangle sum to 180° .
2. Third angle = $180 - 50 - 60 = 70$.

27 Geometry & Coordinate Geometry · Medium

Answer: **C) $-5/3$**

1. Set $y = 0$ in $y = 3x + 5$. $x = -5/3$.

28 Geometry & Coordinate Geometry · Medium

Answer: **B) 24**

1. Hypotenuse = 10.
2. Perimeter = $6 + 8 + 10 = 24$.

29 Geometry & Coordinate Geometry · Hard

Answer: **E) $3\sqrt{5}$**

1. $\Delta x = -3$, $\Delta y = 6$.
2. Distance = $\sqrt{3^2 + 6^2} = 3\sqrt{5}$.

30 Geometry & Coordinate Geometry · Hard

Answer: **E) 6**

1. $\Delta x = 6$, $\Delta y = 0$.
2. Distance = $\sqrt{6^2 + 0^2} = 6$.

Where to go from here

A fresh timed drill, free, every day

The same engine, against a live server-enforced clock, with a streak and a leaderboard. No account, no card.

[Start today's drill →](#)

© 2026 Launchship IT & Media Services Pvt. Ltd. · Quant Daily is independent GRE-style practice and is not affiliated with, endorsed by or sponsored by ETS (GRE) or GMAC (GMAT). GRE® is a registered trademark of ETS; GMAT™ is a trademark of GMAC. · Questions: hello@quantdaily.app