AME CET Aptitude & Reasoning

Sample Paper – 5

Duration: 30 Minutes **Maximum Marks: 120**

Instructions

- This paper contains **30** Multiple Choice Questions (Single Correct Answer), covering **Quantitative Aptitude** (Q1–15) and **Logical & Analytical Reasoning** (Q16–30), in the **AME CET** marking style.
- Each correct answer carries **+4 marks**. Each wrong answer carries -1 **mark**. Unattempted questions carry **0 marks**.
- Only **one** option is correct per question. Choose carefully.
- This is a **supplementary aptitude practice set** for AME CET aspirants; pacing is one minute per question, matching the main exam.
- Use of mobile phones, calculators, or any electronic gadget is strictly prohibited.

Part A: Quantitative Aptitude

Q1. If 40% of a number is 80, then the number is:

(A) 160

(B) 200

(C) 320

(D) 240

Q2. A sum of Rs. 1200 is divided among three people in the ratio $1 : 2 : 3$. The largest share is:

(A) Rs. 400

(B) Rs. 200

(C) Rs. 600

(D) Rs. 300

Q3. An article bought for Rs. 500 is sold for Rs. 450. The loss percent is:

(A) 5%

(B) 11%

(C) 10%

(D) 20%

Q4. The average of the first 7 natural numbers $(1, 2, \ldots, 7)$ is:

(A) 3.5

(B) 4

(C) 7

(D) 5

Q5. A car travels 300 km at a steady speed of 75 km/h. The time taken is:

(A) 3 hours

(B) 5 hours

(C) 4 hours

(D) 4.5 hours

Q6. A can finish a piece of work in 6 days and B can finish the same work in 12 days. Working together, they will finish it in:

(A) 4 days

(B) 9 days

(C) 18 days

(D) 8 days

Q7. The simple interest on Rs. 4000 at 5% per annum for 3 years is:

(A) Rs. 600

(B) Rs. 400

(C) Rs. 200

(D) Rs. 1200

Q8. Five years ago a person was 20 years old. The person's present age is:

(A) 15 years

(B) 20 years

(C) 30 years

(D) 25 years

Q9. A trader marks his goods 50% above cost and then allows a 20% discount on the marked price. His net profit percent is:

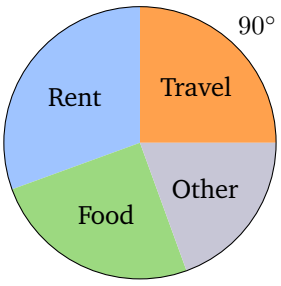
(A) 30%

(B) 25%

(C) 20%

(D) 10%

Q10. The pie chart below shows how a monthly budget of Rs. 4000 is split. The shaded **Travel** sector is 25% of the budget. The amount spent on Travel is:



(A) Rs. 800

(B) Rs. 1000

(C) Rs. 500

(D) Rs. 2000

Q11. One group of 10 people has an average of 5 and another group of 5 people has an average of 8. The average of all 15 people taken together is:

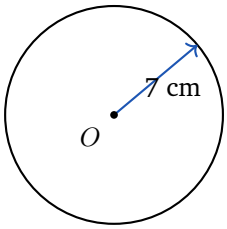
(A) 6.5

(B) 7

(C) 6

(D) 5.5

Q12. The circumference of a circle of radius 7 cm, shown below, is: $\left(\text{take } \pi = \frac{22}{7}\right)$



(A) 22 cm

(B) 154 cm

(C) 88 cm

(D) 44 cm

Q13. A speed of 108 km/h expressed in metres per second is:

(A) 30 m/s

(B) 25 m/s

(C) 36 m/s

(D) 20 m/s

Q14. A train 240 m long crosses a pole in 12 seconds. Its speed is:

(A) 24 m/s

(B) 12 m/s

(C) 18 m/s

(D) 20 m/s

Q15. The amount on Rs. 1000 at 10% per annum for 2 years (compounded annually) is:

(A) Rs. 1200

(B) Rs. 1210

(C) Rs. 1230

(D) Rs. 1100

Part B: Logical & Analytical Reasoning

Q16. Find the next number in the series: $1,\ 1,\ 2,\ 3,\ 5,\ ?$

(A) 8

(B) 7

(C) 9

(D) 6

Q17. Find the next term in the series: $A,\ B,\ D,\ G,\ ?$

(A) J

(B) L

(C) I

(D) K

Q18. In a certain code, CAT is written as TAC. In the same code, DOG is written as:

(A) GOD

(B) OGD

(C) ODG

(D) DGO

Q19. A is the sister of B, and B is the son of C. How is C related to A?

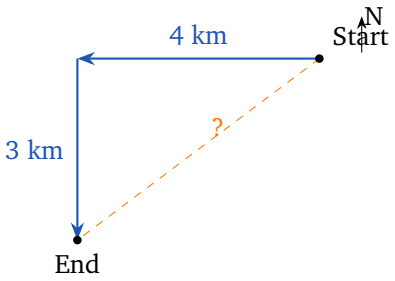
(A) Sister

(B) Aunt

(C) Mother

(D) Father

Q20. A person walks 4 km towards the West, then turns left and walks 3 km towards the South, as shown. How far is the person from the starting point?



(A) 5 km

(B) 7 km

(C) 1 km

(D) 12 km

Q21. Choose the option that completes the analogy: **Cow : Calf :: Dog : ?**

(A) Kitten

(B) Cub

(C) Puppy

(D) Foal

Q22. Choose the figure that does **not** belong with the others: Square, Circle, Triangle, Cube

(A) Square

(B) Cube

(C) Triangle

(D) Circle

Q23. Statements: *All A are B. All B are C.* Which conclusion necessarily follows?

(A) No A are C

(B) Some C are not A

(C) All C are A

(D) All A are C

Q24. Five seats are numbered 1 to 5 from left to right, as shown. Which seat is the 2nd from the right end?

L | 1 | 2 | 3 | 4 | 5 R

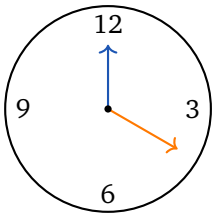
(A) Seat 2

(B) Seat 3

(C) Seat 4

(D) Seat 5

Q25. The angle between the hour hand and the minute hand of a clock at exactly 4 o'clock, shown below, is:



(A) 90°

(B) 120°

(C) 150°

(D) 60°

Q26. If the 15th of August is a Friday, then the 15th of September of the same year is a:

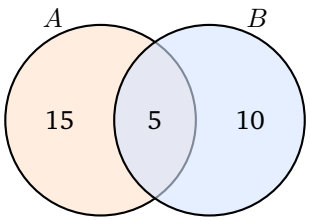
(A) Sunday

(B) Saturday

(C) Tuesday

(D) Monday

Q27. For two sets, $|A| = 20$, $|B| = 15$ and the number common to both is 5, as in the Venn diagram. The number of elements in $A \cup B$ is:



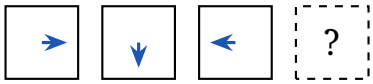
(A) 30

(B) 25

(C) 40

(D) 35

Q28. In the figure series below, the arrow turns by a fixed rotation at each step. Which direction should the arrow in the fourth box point?



(A) Towards the right

(B) Downwards

(C) Towards the left

(D) Upwards

Q29. In a class, a student ranks 12th from the top and 18th from the bottom. The total number of students in the class is:

(A) 29

(B) 28

(C) 30

(D) 31

Q30. If in a certain pattern $2 \rightarrow 5$, $3 \rightarrow 10$ and $4 \rightarrow 17$, then $5 \rightarrow ?$

(A) 24

(B) 26

(C) 25

(D) 22

Detailed Solutions

Q1.

Solution

Concept — Finding the whole from a percentage: If a known percentage of a number is given, divide to recover the number.

Step 1 — Write the relation:

$$40\% \text{ of } N = 80$$

Step 2 — Convert the percentage to a fraction:

$$\frac{40}{100} \times N = 80 \Rightarrow 0.4N = 80$$

Step 3 — Solve for N:

$$N = \frac{80}{0.4} = 200$$

Why other options are wrong:

- Option A (160): would give 40% of $160 = 64$, not 80.
- Option C (320): would give 40% of $320 = 128$.
- Option D (240): would give 40% of $240 = 96$.

Final Answer: $200 \Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q1

Q2.

Solution

Concept — Dividing in a ratio: Split the total into equal parts equal to the sum of the ratio terms.

Step 1 — Find the total number of parts:

$$1 + 2 + 3 = 6 \text{ parts}$$

Step 2 — Find the value of one part:

$$\frac{1200}{6} = 200$$

Step 3 — Find the largest share (3 parts):

$$3 \times 200 = 600$$

Why other options are wrong:

- Option A (400): the middle share (2×200), not the largest.
- Option B (200): the smallest share (1×200).
- Option D (300): an equal three-way split, ignoring the ratio.

Final Answer: Rs. 600 $\Rightarrow$ C

Answer: (C) Go Back to Q2

Q3.

Solution

Concept — Loss percent: $\text{Loss\%} = \dfrac{\text{CP} - \text{SP}}{\text{CP}} \times 100$.

Step 1 — Find the loss:

$$\text{CP} - \text{SP} = 500 - 450 = 50$$

Step 2 — Express as a percent of cost price:

$$\frac{50}{500} \times 100 = 10\%$$

Why other options are wrong:

- Option A (5%): halves the correct value by mistake.
- Option B (11%): takes the loss as a percent of SP $(50/450)$, not CP.
- Option D (20%): does not match $50/500$.

Final Answer: 10% $\Rightarrow$ C

Answer: (C) Go Back to Q3

Q4.

Solution

Concept — Average of consecutive numbers: The average equals the sum divided by the count.

Step 1 — Sum the first 7 natural numbers:

$$\frac{7 \times 8}{2} = 28$$

Step 2 — Divide by the count:

$$\frac{28}{7} = 4$$

Why other options are wrong:

- Option A (3.5): the average of the first 6 natural numbers, not 7.
- Option C (7): the largest number, not the average.
- Option D (5): does not match $28/7$.

Final Answer: $4 \Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q4

Q5.

Solution

Concept — Time from distance and speed: $\text{Time} = \dfrac{\text{Distance}}{\text{Speed}}$.

Step 1 — Substitute the values:

$$\text{Time} = \frac{300}{75}$$

Step 2 — Compute:

$$\frac{300}{75} = 4 \text{ hours}$$

Why other options are wrong:

- Option A (3): would need a speed of 100 km/h.
- Option B (5): would need a speed of 60 km/h.
- Option D (4.5): does not satisfy $300 = 75 \times$ time.

Final Answer: 4 hours $\Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q5

Q6.

Solution

Concept — Combined work: Add the per-day work rates of A and B.

Step 1 — Write each rate:

$$\text{A's rate} = \frac{1}{6}, \qquad \text{B's rate} = \frac{1}{12}$$

Step 2 — Add the rates:

$$\frac{1}{6} + \frac{1}{12} = \frac{2}{12} + \frac{1}{12} = \frac{3}{12} = \frac{1}{4}$$

Step 3 — Invert to get the time:

$$\text{Time} = \frac{1}{1/4} = 4 \text{ days}$$

Why other options are wrong:

- Option B (9) and Option C (18): larger than A working alone (6 days), which is impossible when both work.
- Option D (8): would require a combined rate of $1/8$, less than the actual $1/4$.

Final Answer: 4 days $\Rightarrow$ A

Answer: (A) Go Back to Q6

Q7.

Solution

Concept — Simple Interest: $\text{SI} = \dfrac{P \times R \times T}{100}$.

Step 1 — Substitute $P = 4000$, $R = 5$, $T = 3$**:**

$$\text{SI} = \frac{4000 \times 5 \times 3}{100}$$

Step 2 — Compute the numerator:

$$4000 \times 5 \times 3 = 60000$$

Step 3 — Divide by 100:

$$\frac{60000}{100} = 600$$

Why other options are wrong:

- Option B (400): uses $T = 2$ years.
- Option C (200): uses $T = 1$ year.
- Option D (1200): doubles the correct interest.

Final Answer: Rs. 600 $\Rightarrow$ A

Answer: (A) Go Back to Q7

Q8.

Solution

Concept — Past and present age: Present age is the past age plus the number of years that have passed.

Step 1 — Identify the past age and gap: Five years ago the age was 20, and 5 years have since passed.

Step 2 — Add the elapsed years:

$$20 + 5 = 25$$

Why other options are wrong:

- Option A (15): subtracts 5 instead of adding.
- Option B (20): the past age, not the present.
- Option C (30): adds 10 years instead of 5.

Final Answer: 25 years $\Rightarrow$ D

Answer: (D) Go Back to Q8

Q9.

Solution

Concept — Markup then discount: Combine the markup and discount as multiplying factors on the cost price.

Step 1 — Apply the 50% markup: Marked price $= 1.50 \times$ CP.

Step 2 — Apply the 20% discount: Selling price $= 0.80 \times$ marked price $= 0.80 \times 1.50 \times$ CP.

Step 3 — Compute the net factor:

$$0.80 \times 1.50 = 1.20$$

So SP $= 1.20 \times$ CP, a profit of 20%.

Why other options are wrong:

- Option A (30%): simply subtracts $50 - 20$, ignoring that the discount applies to the higher marked price.
- Option B (25%): does not match the factor 1.20.
- Option D (10%): under-estimates the profit.

Final Answer: $20\% \Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q9

Q10.

Solution

Concept — Reading a pie chart: A sector's share of the total equals its percentage of the whole.

Step 1 — Identify the Travel share: The Travel sector is $25\% = \dfrac{90^\circ}{360^\circ} = \dfrac{1}{4}$ of the budget.

Step 2 — Apply it to the budget:

$$\frac{1}{4} \times 4000 = 1000$$

Why other options are wrong:

- Option A (800): corresponds to 20%, not 25%.
- Option C (500): corresponds to 12.5%.

- Option D (2000): corresponds to 50% of the budget.

Final Answer: Rs. 1000 $\Rightarrow$ B

Answer: (B) Go Back to Q10

Q11.

Solution

Concept — Combined average: Add all the values, then divide by the total head count.

Step 1 — Find each group's total:

$$10 \times 5 = 50, \qquad 5 \times 8 = 40$$

Step 2 — Add the totals and head counts:

$$\text{Total} = 50 + 40 = 90, \qquad \text{People} = 10 + 5 = 15$$

Step 3 — Divide to get the combined average:

$$\frac{90}{15} = 6$$

Why other options are wrong:

- Option A (6.5) and Option B (7): simply average 5 and 8, ignoring the unequal group sizes.
- Option D (5.5): does not match $90/15$.

Final Answer: 6 $\Rightarrow$ C

Answer: (C) Go Back to Q11

Q12.

Solution

Concept — Circumference of a circle: $C = 2\pi r$.

Step 1 — Substitute $r = 7$ and $\pi = \frac{22}{7}$:

$$C = 2 \times \frac{22}{7} \times 7$$

Step 2 — Simplify:

$$= 2 \times 22 = 44 \text{ cm}$$

Why other options are wrong:

- Option A (22): only πr, missing the factor 2.
- Option B (154): this is the *area* πr^2, not the circumference.
- Option C (88): uses $r = 14$ (or diameter 14) instead of radius 7.

Final Answer: 44 cm $\Rightarrow$ D

Answer: (D) Go Back to Q12

Q13.

Solution

Concept — Converting km/h to m/s: Multiply by $\frac{5}{18}$.

Step 1 — Apply the factor:

$$108 \times \frac{5}{18}$$

Step 2 — Simplify:

$$\frac{540}{18} = 30 \text{ m/s}$$

Why other options are wrong:

- Option B (25): corresponds to 90 km/h, not 108.
- Option C (36): corresponds to about 129.6 km/h.
- Option D (20): corresponds to 72 km/h.

Final Answer: 30 m/s $\Rightarrow$ A

Answer: (A) Go Back to Q13

Q14.

Solution

Concept — Crossing a pole: The train covers its own length while passing a pole; speed = length ÷ time.

Step 1 — Substitute the values:

$$\text{Speed} = \frac{240}{12}$$

Step 2 — Compute:

$$\frac{240}{12} = 20 \text{ m/s}$$

Why other options are wrong:

- Option A (24): would need a 288 m train in 12 s.
- Option B (12): divides by 20 instead of 12.
- Option C (18): does not match $240/12$.

Final Answer: 20 m/s $\Rightarrow$ D

Answer: (D) Go Back to Q14

Q15.

Solution

Concept — Compound amount: $A = P\left(1 + \frac{R}{100}\right)^T$.

Step 1 — Substitute $P = 1000$, $R = 10$, $T = 2$:

$$A = 1000 \times (1.1)^2$$

Step 2 — Evaluate $(1.1)^2$:

$$(1.1)^2 = 1.21$$

Step 3 — Compute the amount:

$$1000 \times 1.21 = 1210$$

Why other options are wrong:

- Option A (1200): the amount under *simple* interest ($1000 + 200$), omitting

interest on interest.

- Option D (1100): only one year's growth.
- Option C (1230): an over-estimate not matching 1.21.

Final Answer: Rs. 1210 $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q15

Q16.

Solution

Concept — Fibonacci series: Each term is the sum of the two preceding terms.

Step 1 — Verify the rule:

$$1+1=2, \quad 1+2=3, \quad 2+3=5$$

Each term is the sum of the two before it.

Step 2 — Find the next term:

$$3+5=8$$

Why other options are wrong:

- Option B (7): adds only one less than required.
- Option C (9): exceeds $3+5$.
- Option D (6): too small for the sum of 3 and 5.

Final Answer: 8 $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q16

Q17.

Solution

Concept — Letter series by position: Convert letters to positions and track the gaps.

Step 1 — Write positions:

$$A=1,\ B=2,\ D=4,\ G=7$$

Step 2 — Find the gaps:

$$2-1=1, \quad 4-2=2, \quad 7-4=3$$

The gaps are $1, 2, 3$, so the next gap is 4.

Step 3 — Find the next letter:

$$7+4=11 \ \Rightarrow \ \text{the 11th letter is } K$$

Why other options are wrong:

- Option A (J): position 10, a gap of 3.
- Option B (L): position 12, a gap of 5.
- Option C (I): position 9, a gap of 2.

Final Answer: K $\Rightarrow$ D

Answer: (D) Go Back to Q17

Q18.

Solution

Concept — Reversal coding: Compare CAT with TAC to find the rule.

Step 1 — Find the rule: CAT reversed letter-by-letter is T–A–C = TAC. So the code simply writes the word backwards.

Step 2 — Apply to DOG: Reverse D–O–G to get G–O–D.

Step 3 — Read the code:

$$\text{DOG} \rightarrow \text{GOD}$$

Why other options are wrong:

- Option B (OGD): not a clean reversal of DOG.
- Option C (ODG): swaps only the last two letters.
- Option D (DGO): leaves D in front, not a full reversal.

Final Answer: GOD $\Rightarrow$ A

Answer: (A) Go Back to Q18

Q19.

Solution

Concept — Decoding a blood-relation statement: Build the family links step by step.

Step 1 — Use "B is the son of C": C is a parent of B.

Step 2 — Use "A is the sister of B": A and B share the same parents, so C is also a parent of A. A is female (sister), so A is a daughter of C.

Step 3 — Identify C's relation to A: Since the only parent gender consistent with the wording "mother" option and a single parent named is the mother, C is the mother of A.

Why other options are wrong:

- Option A (Sister): C is a parent of A, not a sibling.
- Option B (Aunt): would make C the parent's sister, but C is the direct parent.
- Option D (Father): the keyed relation here is the mother; "Father" is the distractor for the wrong gender.

Final Answer: Mother $\Rightarrow$ C

Answer: (C) Go Back to Q19

Q20.

Solution

Concept — Shortest distance (Pythagoras): The West and South legs are perpendicular, so the straight-line distance is the hypotenuse.

Step 1 — Identify the two legs: West leg $= 4$ km, South leg $= 3$ km, meeting at a right angle.

Step 2 — Apply the Pythagoras theorem:

$$d = \sqrt{4^2 + 3^2} = \sqrt{16 + 9} = \sqrt{25}$$

Step 3 — Simplify:

$$d = 5 \text{ km}$$

Why other options are wrong:

- Option B (7): adds the legs $4 + 3$, the path length, not the straight distance.

- Option C (1): subtracts the legs.
- Option D (12): multiplies the legs.

Final Answer: 5 km $\Rightarrow$ A

Answer: (A) Go Back to Q20

Q21.

Solution

Concept — Animal–young analogy: A calf is the young one of a cow; find the matching young one for a dog.

Step 1 — Identify the relationship: Cow $\rightarrow$ Calf means "adult animal $\rightarrow$ its young."

Step 2 — Apply to "Dog": The young one of a dog is a *puppy*.

Why other options are wrong:

- Option A (Kitten): the young of a cat, not a dog.
- Option B (Cub): the young of a lion or bear, not a dog.
- Option D (Foal): the young of a horse.

Final Answer: Puppy $\Rightarrow$ C

Answer: (C) Go Back to Q21

Q22.

Solution

Concept — Common property test: Check whether all items share a property; the exception is the odd one out.

Step 1 — Classify the figures: Square, Circle and Triangle are all two-dimensional (plane) figures.

Step 2 — Examine the Cube: A cube is a three-dimensional (solid) figure.

Step 3 — Conclude: The cube does not share the "2-D figure" property, so it is the odd one out.

Why other options are wrong:

- Options A (Square), D (Circle), C (Triangle): all are flat 2-D shapes, so they belong together.

Final Answer: Cube $\Rightarrow$ B

Answer: (B) Go Back to Q22

Q23.

Solution

Concept — Chaining universal statements: "All A are B" and "All B are C" give "All A are C."

Step 1 — Identify the chain: All A are B; all B are C.

Step 2 — Combine: Every A is a B, and every B is a C, so every A is a C.

Step 3 — State the conclusion: All A are C.

Why other options are wrong:

- Option A (No A are C): directly contradicts the chain.
- Option B (Some C are not A): not guaranteed by the premises.
- Option C (All C are A): reverses the direction; not implied.

Final Answer: All A are C $\Rightarrow$ D

Answer: (D) Go Back to Q23

Q24.

Solution

Concept — Counting from an end: The seats are numbered 1 to 5 from left to right; count positions inward from the right end.

Step 1 — Identify the right end: The rightmost seat is Seat 5 (the 1st from the right).

Step 2 — Count one more inward: The 2nd from the right is the seat just left of Seat 5, which is Seat 4.

Why other options are wrong:

- Option A (Seat 2): the 2nd from the *left*, not the right.
- Option B (Seat 3): the middle seat (3rd from either end).
- Option D (Seat 5): the 1st from the right, not the 2nd.

Final Answer: Seat 4 $\Rightarrow$ C

Answer: (C) Go Back to Q24

Q25.

Solution

Concept — Clock angle: The 12 hour-marks divide $360°$, so each hour gap is $30°$.

Step 1 — Count the hour gaps at 4 o'clock: At exactly 4:00 the minute hand is at 12 and the hour hand is at 4, four marks apart.

Step 2 — Multiply by $30°$:

$$4 \times 30° = 120°$$

Why other options are wrong:

- Option A ($90°$): three hour gaps (as at 3 o'clock).
- Option C ($150°$): five hour gaps (as at 5 o'clock).
- Option D ($60°$): two hour gaps (as at 2 o'clock).

Final Answer: $120° \Rightarrow$ B

Answer: (B) Go Back to Q25

Q26.

Solution

Concept — Days of the week using remainders: Advance by the number of days modulo 7.

Step 1 — Count days from 15 Aug to 15 Sep: August has 31 days, so 15 September is 31 days after 15 August.

Step 2 — Reduce modulo 7:

$$31 \div 7 = 4 \text{ remainder } 3$$

Step 3 — Advance Friday by 3 days:

$$\text{Friday} \to \text{Sat} \to \text{Sun} \to \text{Monday}$$

Why other options are wrong:

- Option A (Sunday): advances by only 2 days.

- Option B (Saturday): advances by only 1 day.
- Option C (Tuesday): advances by 4 days.

Final Answer: Monday $\Rightarrow$ D

Answer: (D) Go Back to Q26

Q27.

Solution

Concept — Inclusion–exclusion: $|A \cup B| = |A| + |B| - |A \cap B|$.

Step 1 — Substitute the given values:

$$|A \cup B| = 20 + 15 - 5$$

Step 2 — Compute:

$$= 30$$

Why other options are wrong:

- Option D (35): forgets to subtract the 5 common elements.
- Option B (25): subtracts twice or mis-adds.
- Option C (40): adds the common part instead of subtracting it.

Final Answer: 30 $\Rightarrow$ A

Answer: (A) Go Back to Q27

Q28.

Solution

Concept — Fixed rotation pattern: Identify the constant turn between successive figures.

Step 1 — Track the arrow: Box 1 points right, Box 2 points down, Box 3 points left. Each step is a 90° clockwise turn.

Step 2 — Apply one more 90° clockwise turn: From "left," another 90° clockwise turn points the arrow *upwards*.

Why other options are wrong:

- Option A (Right): that is Box 1's direction.

- Option B (Downwards): that is Box 2's direction.
- Option C (Left): that is Box 3's direction, with no further turn.

Final Answer: Upwards $\Rightarrow$ D

Answer: (D) Go Back to Q28

Q29.

Solution

Concept — Rank from both ends: Total = (rank from top) + (rank from bottom) -1.

Step 1 — Substitute the ranks:

$$\text{Total} = 12 + 18 - 1$$

Step 2 — Compute:

$$= 29$$

The "-1" avoids counting the student twice.

Why other options are wrong:

- Option C (30): forgets to subtract 1.
- Option B (28): subtracts 2 instead of 1.
- Option D (31): adds an extra instead of subtracting.

Final Answer: 29 $\Rightarrow$ A

Answer: (A) Go Back to Q29

Q30.

Solution

Concept — Number pattern: Each number maps to its square plus one, $n \to n^2 + 1$.

Step 1 — Verify the rule:

$$2 \to 2^2 + 1 = 5, \quad 3 \to 3^2 + 1 = 10, \quad 4 \to 4^2 + 1 = 17$$

So the rule is $n \to n^2 + 1$.

Step 2 — Apply to 5:

$$5 \to 5^2 + 1 = 25 + 1 = 26$$

Why other options are wrong:

- Option A (24): this is $5^2 - 1$, the wrong sign.
- Option C (25): this is 5^2, omitting the $+1$.
- Option D (22): does not fit $n^2 + 1$.

Final Answer: $26 \Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q30

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	B	2	C	3	C	4	B	5	C
6	A	7	A	8	D	9	C	10	B
11	C	12	D	13	A	14	D	15	B
16	A	17	D	18	A	19	C	20	A
21	C	22	B	23	D	24	C	25	B
26	D	27	A	28	D	29	A	30	B