AME CET Aptitude & Reasoning

Sample Paper – 2

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. The value of 25% of 240 is:

(A) 48

(B) 60

(C) 72

(D) 40

Q2. An amount of Rs. 480 is divided between two people in the ratio $5 : 3$. The larger share is:

(A) Rs. 300

(B) Rs. 180

(C) Rs. 240

(D) Rs. 320

Q3. An article is bought for Rs. 250 and sold for Rs. 200. The loss percent is:

(A) 25%

(B) 30%

(C) 20%

(D) 15%

Q4. The average of the numbers $10, 20, 30, 40, 50$ is:

(A) 25

(B) 35

(C) 40

(D) 30

Q5. A car covers a distance of 240 km in 4 hours. Its average speed is:

(A) 60 km/h

(B) 50 km/h

(C) 70 km/h

(D) 48 km/h

Q6. A can finish a piece of work in 10 days and B can finish the same work in 15 days. Working together, they will finish it in:

(A) 12 days

(B) 5 days

(C) 6 days

(D) 25 days

Q7. The simple interest on Rs. 1500 at 4% per annum for 2 years is:

(A) Rs. 60

(B) Rs. 120

(C) Rs. 150

(D) Rs. 240

Q8. A father is 45 years old and his son is 15 years old. After how many years will the father's age be twice the son's age?

(A) 15 years

(B) 10 years

(C) 20 years

(D) 30 years

Q9. A trader marks his goods 25% above cost and then allows a 20% discount on the marked price. His net result is:

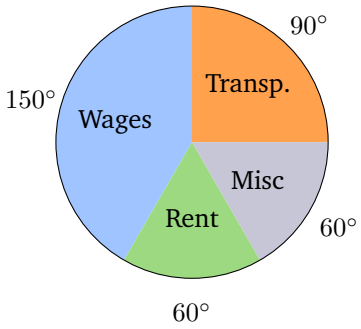
(A) 5% profit

(B) 5% loss

(C) 2% profit

(D) neither profit nor loss

Q10. The pie chart below shows how a company's monthly budget of Rs. 7,200 is allocated. The amount allocated to **Transport**, shown by the 90° sector, is:



(A) Rs. 900

(B) Rs. 1,200

(C) Rs. 1,800

(D) Rs. 2,400

Q11. The average of 6 numbers is 25. The sum of all six numbers is:

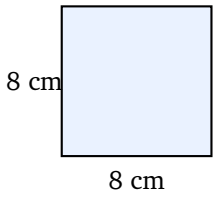
(A) 150

(B) 125

(C) 175

(D) 120

Q12. The area of the square of side 8 cm, shown below, is:



(A) 32 cm^2

(B) 16 cm^2

(C) 48 cm^2

(D) 64 cm^2

Q13. A speed of 72 km/h expressed in metres per second is:

(A) 25 m/s

(B) 20 m/s

(C) 18 m/s

(D) 15 m/s

Q14. A train 150 m long crosses a pole in 15 seconds. Its speed is:

(A) 54 km/h

(B) 45 km/h

(C) 36 km/h

(D) 30 km/h

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

(A) Rs. 200

(B) Rs. 100

(C) Rs. 220

(D) Rs. 210

Part B: Logical & Analytical Reasoning

Q16. Find the next number in the series: $2,\ 4,\ 8,\ 16,\ ?$

(A) 24

(B) 32

(C) 30

(D) 20

Q17. Find the next term in the series: $A,\ C,\ E,\ G,\ ?$

(A) I

(B) H

(C) J

(D) K

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

(A) EPG

(B) COF

(C) EPH

(D) DPH

Q19. A is the father of B, and B is the mother of C. How is A related to C?

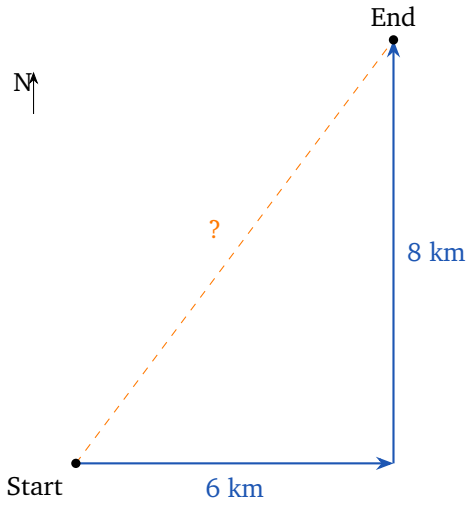
(A) Father

(B) Grandfather

(C) Uncle

(D) Brother

Q20. A person walks 6 km towards the East, then turns left and walks 8 km towards the North, as shown. How far is the person from the starting point?



(A) 14 km

(B) 2 km

(C) 48 km

(D) 10 km

Q21. Choose the option that completes the analogy: **Bird : Nest :: Bee : ?**

(A) Hive

(B) Honey

(C) Flower

(D) Wing

Q22. Choose the number that does **not** belong with the others: $4,\ 8,\ 12,\ 15$

(A) 4

(B) 8

(C) 15

(D) 12

Q23. Statements: *All dogs are animals. All animals breathe.* Which conclusion necessarily follows?

(A) No dog breathes

(B) Some dogs are not animals

(C) Dogs never breathe

(D) All dogs breathe

Q24. Five children P, Q, R, S, T sit in a row in that order from left to right, as shown. Who sits exactly in the middle of the row?

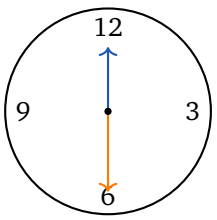
(A) Q

(B) R

(C) S

(D) T

Q25. The angle between the hour hand and the minute hand of a clock at exactly 6 o'clock, shown below, is:



(A) 90°

(B) 120°

(C) 180°

(D) 150°

Q26. If the 1st of January in a (non-leap) year is a Monday, then the 1st of March of the same year is a:

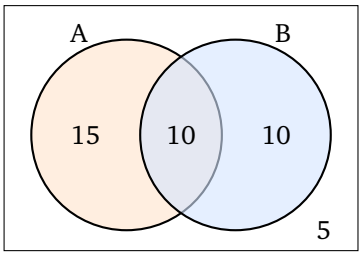
(A) Thursday

(B) Wednesday

(C) Friday

(D) Tuesday

Q27. In a group of 40 people, 25 like product A, 20 like product B and 10 like both, as in the Venn diagram. How many like **neither**?



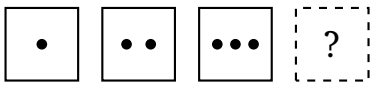
(A) 15

(B) 10

(C) 20

(D) 5

Q28. In the figure series below, the number of dots increases by a fixed amount at each step. How many dots should appear in the fourth box?



(A) 5 dots

(B) 4 dots

(C) 6 dots

(D) 3 dots

Q29. In a class, a student ranks 5th from the top and 10th from the bottom. The total number of students in the class is:

(A) 14

(B) 15

(C) 13

(D) 16

Q30. If in a certain pattern $2 \rightarrow 8$ and $3 \rightarrow 27$, then $4 \rightarrow ?$

(A) 16

(B) 48

(C) 64

(D) 32

Detailed Solutions

Q1.

Solution

Concept — Percentage of a number: "$p\%$ of N" means $\frac{p}{100} \times N$.

Step 1 — Write 25% as a fraction:

$$25\% = \frac{25}{100} = \frac{1}{4}$$

Step 2 — Multiply by 240:

$$\frac{1}{4} \times 240 = 60$$

Why other options are wrong:

- Option A (48): this is 20% of 240, not 25%.
- Option C (72): this is 30% of 240.
- Option D (40): an arithmetic slip, not a quarter of 240.

Final Answer: $60 \Rightarrow \boxed{\text{B}}$

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:

$$5 + 3 = 8 \text{ parts}$$

Step 2 — Find the value of one part:

$$\frac{480}{8} = 60$$

Step 3 — Find the larger share (5 parts):

$$5 \times 60 = 300$$

Why other options are wrong:

- Option B (180): the smaller share (3×60), not the larger.
- Option C (240): an equal split, ignoring the ratio.
- Option D (320): exceeds the correct $5 : 3$ division of 480.

Final Answer: Rs. 300 $\Rightarrow$ A

Answer: (A) 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:

$$\text{CP} - \text{SP} = 250 - 200 = 50$$

Step 2 — Express as a percent of cost price:

$$\frac{50}{250} \times 100 = 20\%$$

Why other options are wrong:

- Option A (25%): takes the loss as a percent of SP, not CP.
- Option B (30%): does not match $50/250$.
- Option D (15%): an arithmetic slip.

Final Answer: 20% $\Rightarrow$ C

Answer: (C) Go Back to Q3

Q4.

Solution

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

Step 1 — Sum the numbers:

$$10 + 20 + 30 + 40 + 50 = 150$$

Step 2 — Divide by the count (5):

$$\frac{150}{5} = 30$$

Why other options are wrong:

- Option A (25): too small for these equally spaced numbers.
- Option B (35): not equal to $150/5$.
- Option C (40): this is the fourth number, not the average.

Final Answer: $30 \Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q4

Q5.

Solution

Concept — Average speed: $\text{Speed} = \dfrac{\text{Distance}}{\text{Time}}$.

Step 1 — Substitute the values:

$$\text{Speed} = \frac{240}{4}$$

Step 2 — Compute:

$$\frac{240}{4} = 60 \text{ km/h}$$

Why other options are wrong:

- Option B (50) and Option D (48): do not satisfy $240 = \text{speed} \times 4$.
- Option C (70): would cover more than 240 km in 4 hours.

Final Answer: 60 km/h $\Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q5

Q6.

Solution

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

Step 1 — Write each rate:

$$\text{A's rate} = \frac{1}{10}, \qquad \text{B's rate} = \frac{1}{15}$$

Step 2 — Add the rates (LCM of 10 and 15 is 30):

$$\frac{1}{10} + \frac{1}{15} = \frac{3}{30} + \frac{2}{30} = \frac{5}{30} = \frac{1}{6}$$

Step 3 — Invert to get the time:

$$\text{Time} = \frac{1}{1/6} = 6 \text{ days}$$

Why other options are wrong:

- Option A (12) and Option D (25): larger than A working alone (10 days), which is impossible when both work.
- Option B (5): would require a combined rate of $1/5$, more than the actual $1/6$.

Final Answer: 6 days $\Rightarrow$ C

Answer: (C) Go Back to Q6

Q7.

Solution

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

Step 1 — Substitute $P = 1500$, $R = 4$, $T = 2$:

$$\text{SI} = \frac{1500 \times 4 \times 2}{100}$$

Step 2 — Compute the numerator:

$$1500 \times 4 \times 2 = 12000$$

Step 3 — Divide by 100:

$$\frac{12000}{100} = 120$$

Why other options are wrong:

- Option A (60): uses $T = 1$ year only.
- Option C (150): does not match the formula.
- Option D (240): doubles the correct interest.

Final Answer: Rs. 120 $\Rightarrow$ B

Answer: (B) Go Back to Q7

Q8.

Solution

Concept — Linear age equation: Let the required number of years be x and set up the "twice as old" condition.

Step 1 — Write the ages after x years: Father: $45 + x$, Son: $15 + x$.

Step 2 — Apply the condition (father twice the son):

$$45 + x = 2(15 + x)$$

Step 3 — Solve:

$$45 + x = 30 + 2x \Rightarrow 45 - 30 = 2x - x \Rightarrow x = 15$$

Why other options are wrong:

- Option B (10): gives 55 vs $2 \times 25 = 50$, not equal.
- Option C (20): gives 65 vs $2 \times 35 = 70$, not equal.
- Option D (30): gives 75 vs $2 \times 45 = 90$, not equal.

Final Answer: 15 years $\Rightarrow$ A

Answer: (A) 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 25% markup: Marked price $= 1.25 \times$ CP.

Step 2 — Apply the 20% discount: Selling price $= 0.80 \times$ marked price $= 0.80 \times 1.25 \times$ CP.

Step 3 — Compute the net factor:

$$0.80 \times 1.25 = 1.00$$

So SP $= 1.00 \times$ CP, exactly equal to the cost price.

Why other options are wrong:

- Option A (5% profit): incorrectly subtracts $25 - 20$ as the profit.
- Option B (5% loss): wrong direction and wrong magnitude.
- Option C (2% profit): does not match the factor 1.00.

Final Answer: neither profit nor loss $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q9

Q10.

Solution

Concept — Reading a pie chart: Each sector's share of the total equals its angle divided by $360°$.

Step 1 — Find the Transport fraction:

$$\frac{90°}{360°} = \frac{1}{4}$$

Step 2 — Apply it to the budget:

$$\frac{1}{4} \times 7200 = 1800$$

Why other options are wrong:

- Option A (900): corresponds to a $45°$ sector.

- Option B (1200): corresponds to the 60° sectors (Rent or Misc).
- Option D (2400): would need a 120° sector.

Final Answer: Rs. 1,800 $\Rightarrow$ C

Answer: (C) Go Back to Q10

Q11.

Solution

Concept — Average and total: Total = average $\times$ count.

Step 1 — Identify the average and the count: Average $= 25$, count $= 6$.

Step 2 — Multiply:

$$25 \times 6 = 150$$

Why other options are wrong:

- Option B (125): uses a count of 5.
- Option C (175): uses a count of 7.
- Option D (120): an arithmetic slip, not 25×6.

Final Answer: 150 $\Rightarrow$ A

Answer: (A) Go Back to Q11

Q12.

Solution

Concept — Area of a square: $A = \text{side}^2$.

Step 1 — Substitute the side $= 8$ cm:

$$A = 8^2$$

Step 2 — Compute:

$$8^2 = 64 \text{ cm}^2$$

Why other options are wrong:

- Option A (32): this is 4×8, half of the perimeter times side, not the area.
- Option B (16): this is 2×8, not 8^2.

- Option C (48): an incorrect product.

Final Answer: 64 $\text{cm}^2 \Rightarrow$ 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:

$$72 \times \frac{5}{18}$$

Step 2 — Simplify:

$$\frac{360}{18} = 20 \text{ m/s}$$

Why other options are wrong:

- Option A (25): corresponds to 90 km/h, not 72.
- Option C (18): corresponds to about 64.8 km/h.
- Option D (15): corresponds to 54 km/h.

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

Answer: (B) 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 — Find the speed in m/s:

$$\frac{150}{15} = 10 \text{ m/s}$$

Step 2 — Convert to km/h (multiply by $\frac{18}{5}$):

$$10 \times \frac{18}{5} = 36 \text{ km/h}$$

Why other options are wrong:

- Option A (54): corresponds to 15 m/s.
- Option B (45): corresponds to 12.5 m/s.
- Option D (30): corresponds to about 8.3 m/s.

Final Answer: 36 km/h $\Rightarrow$ C

Answer: (C) Go Back to Q14

Q15.

Solution

Concept — Compound Interest: $\text{CI} = P\left[(1+\frac{R}{100})^T - 1\right]$.

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

$$\text{CI} = 1000\left[(1.1)^2 - 1\right]$$

Step 2 — Evaluate $(1.1)^2$**:**

$$(1.1)^2 = 1.21$$

Step 3 — Compute:

$$1000 \times (1.21 - 1) = 1000 \times 0.21 = 210$$

Why other options are wrong:

- Option A (200): this is the simple interest ($1000 \times 10\% \times 2$), which omits interest on interest.
- Option B (100): only one year's simple interest.
- Option C (220): an over-estimate.

Final Answer: Rs. 210 $\Rightarrow$ D

Answer: (D) Go Back to Q15

Q16.

Solution

Concept — Geometric (doubling) series: Check the ratio between consecutive terms.

Step 1 — Find the ratios:

$$\frac{4}{2} = 2, \quad \frac{8}{4} = 2, \quad \frac{16}{8} = 2$$

Each term is double the previous one.

Step 2 — Double the last term:

$$16 \times 2 = 32$$

Why other options are wrong:

- Option A (24): adds 8 instead of doubling.
- Option C (30): not a valid term of the doubling pattern.
- Option D (20): adds 4 instead of doubling.

Final Answer: $32 \Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q16

Q17.

Solution

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

Step 1 — Write positions:

$$A = 1,\ C = 3,\ E = 5,\ G = 7$$

Step 2 — Find the gaps:

$$3 - 1 = 2, \quad 5 - 3 = 2, \quad 7 - 5 = 2$$

The gap is constant at 2, so the next position is $7 + 2 = 9$.

Step 3 — Find the next letter:

$$\text{The 9th letter is } I$$

Why other options are wrong:

- Option B (H): position 8, a gap of 1.
- Option C (J): position 10, a gap of 3.
- Option D (K): position 11, a gap of 4.

Final Answer: I $\Rightarrow$ A

Answer: (A) Go Back to Q17

Q18.

Solution

Concept — Letter-shift coding: Compare CAT with DBU to find the rule.

Step 1 — Find the shift:

$$C \to D,\ A \to B,\ T \to U$$

Each letter moves forward by one position $(+1)$.

Step 2 — Apply $+1$ to DOG:

$$D \to E,\ O \to P,\ G \to H$$

Step 3 — Read the code:

$$\text{DOG} \to \text{EPH}$$

Why other options are wrong:

- Option A (EPG): codes G as G (no shift) instead of H.
- Option B (COF): shifts each letter backward (-1).
- Option D (DPH): codes D as D (no shift) instead of E.

Final Answer: EPH $\Rightarrow$ C

Answer: (C) Go Back to Q18

Q19.

Solution

Concept — Tracing generations: Move from A down to C one relationship at a time.

Step 1 — A to B: A is the father of B, so B is A's child (one generation below A).

Step 2 — B to C: B is the mother of C, so C is B's child (one generation below B).

Step 3 — Combine: C is two generations below A, and A is male, so A is the *grandfather* of C.

Why other options are wrong:

- Option A (Father): only one generation apart, but C is two below A.
- Option C (Uncle): would require A to be a sibling of C's parent, not the parent's father.
- Option D (Brother): same generation, which is not the case.

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

Answer: (B) Go Back to Q19

Q20.

Solution

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

Step 1 — Identify the two legs: East leg $= 6$ km, North leg $= 8$ km, meeting at a right angle.

Step 2 — Apply the Pythagoras theorem:

$$d = \sqrt{6^2 + 8^2} = \sqrt{36 + 64} = \sqrt{100}$$

Step 3 — Simplify:

$$d = 10 \text{ km}$$

Why other options are wrong:

- Option A (14): adds the legs $6 + 8$, the path length, not the straight distance.
- Option B (2): subtracts the legs.
- Option C (48): multiplies the legs.

Final Answer: 10 km $\Rightarrow$ D

Answer: (D) Go Back to Q20

Q21.

Solution

Concept — Dwelling analogy: A nest is the home a bird builds and lives in; find the matching home for a bee.

Step 1 — Identify the relationship: Bird $\rightarrow$ Nest means "the home the creature lives in."

Step 2 — Apply to "Bee": The home in which bees live is a *hive*.

Why other options are wrong:

- Option B (Honey): the product a bee makes, not its home.
- Option C (Flower): a place a bee visits, not where it lives.
- Option D (Wing): a body part, not a home.

Final Answer: Hive $\Rightarrow$ A

Answer: (A) Go Back to Q21

Q22.

Solution

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

Step 1 — Test for divisibility by 4: $4 = 4 \times 1$, $8 = 4 \times 2$, $12 = 4 \times 3$ are all multiples of 4.

Step 2 — Examine 15: $15 = 4 \times 3 + 3$ is not a multiple of 4.

Step 3 — Conclude: 15 does not share the "multiple of 4" property, so it is the odd one out.

Why other options are wrong:

- Options A (4), B (8), D (12): all are multiples of 4, so they belong together.

Final Answer: 15 $\Rightarrow$ C

Answer: (C) 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 dogs are animals; all animals breathe.

Step 2 — Combine: Every dog is an animal, and every animal breathes, so every dog breathes.

Step 3 — State the conclusion: All dogs breathe.

Why other options are wrong:

- Option A (No dog breathes): directly contradicts the chain.
- Option B (Some dogs are not animals): contradicts "all dogs are animals."
- Option C (Dogs never breathe): contradicts the conclusion.

Final Answer: All dogs breathe $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q23

Q24.

Solution

Concept — Reading a fixed left-to-right order: The seats are in the order P, Q, R, S, T from left to right.

Step 1 — Count the seats: There are five seats, so the middle seat is the third one.

Step 2 — Find the third person: Counting from the left: P (1st), Q (2nd), R (3rd). The middle person is R.

Why other options are wrong:

- Option A (Q): the second seat, not the middle.
- Option C (S): the fourth seat.
- Option D (T): the far right end.

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

Answer: (B) 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 6 o'clock: At exactly 6:00 the minute hand is at 12 and the hour hand is at 6, six marks apart.

Step 2 — Multiply by $30°$:

$$6 \times 30° = 180°$$

Why other options are wrong:

- Option A ($90°$): three hour gaps (as at 3 o'clock).
- Option B ($120°$): four hour gaps (as at 4 o'clock).
- Option D ($150°$): five hour gaps (as at 5 o'clock).

Final Answer: $180° \Rightarrow \boxed{C}$

Answer: (C) 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 1 Jan to 1 Mar (non-leap year): January has 31 days and February has 28 days, so 1 March is $31 + 28 = 59$ days after 1 January.

Step 2 — Reduce modulo 7:

$$59 \div 7 = 8 \text{ remainder } 3$$

Step 3 — Advance Monday by 3 days:

$$\text{Monday} \rightarrow \text{Tue} \rightarrow \text{Wed} \rightarrow \text{Thursday}$$

Why other options are wrong:

- Option B (Wednesday): advances by only 2 days.
- Option C (Friday): advances by 4 days.
- Option D (Tuesday): advances by only 1 day.

Final Answer: Thursday $\Rightarrow$ A

Answer: (A) Go Back to Q26

Q27.

Solution

Concept — Inclusion–exclusion: $n(\text{A or B}) = n(\text{A}) + n(\text{B}) - n(\text{both})$.

Step 1 — Count those who like at least one product:

$$25 + 20 - 10 = 35$$

Step 2 — Subtract from the total group:

$$40 - 35 = 5$$

Why other options are wrong:

- Option A (15): forgets to subtract the 10 who like both.
- Option B (10): the "both" count, not "neither."
- Option C (20): an incorrect subtraction.

Final Answer: $5 \Rightarrow$ D

Answer: (D) Go Back to Q27

Q28.

Solution

Concept — Fixed increment pattern: Identify the constant change in the number of dots.

Step 1 — Count the dots in each box: Box 1 has 1 dot, Box 2 has 2 dots, Box 3 has 3 dots.

Step 2 — Find the pattern: Each box adds exactly one more dot than the previous, so the count goes $1, 2, 3, \ldots$

Step 3 — Apply to Box 4:

$$3 + 1 = 4 \text{ dots}$$

Why other options are wrong:

- Option A (5 dots): skips a step (would suit Box 5).
- Option C (6 dots): too many for the next box.
- Option D (3 dots): repeats Box 3 with no increase.

Final Answer: 4 dots $\Rightarrow$ B

Answer: (B) Go Back to Q28

Q29.

Solution

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

Step 1 — Substitute the ranks:

$$\text{Total} = 5 + 10 - 1$$

Step 2 — Compute:

$$= 14$$

The "-1" avoids counting the student twice.

Why other options are wrong:

- Option B (15): forgets to subtract 1.
- Option C (13): subtracts 2 instead of 1.
- Option D (16): adds an extra student.

Final Answer: 14 $\Rightarrow$ A

Answer: (A) Go Back to Q29

Q30.

Solution

Concept — Number pattern: Each number maps to its cube.

Step 1 — Verify the rule:

$$2 \to 2^3 = 8, \qquad 3 \to 3^3 = 27$$

So the rule is $n \to n^3$.

Step 2 — Apply to 4:

$$4 \to 4^3 = 64$$

Why other options are wrong:

- Option A (16): this is 4^2, a square, not a cube.
- Option B (48): this is 4×12, not 4^3.
- Option D (32): this is 4×8, not 4^3.

Final Answer: $64 \Rightarrow \boxed{C}$

Answer: (C) Go Back to Q30

Answer Key

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