

# RIE CEE Reasoning Ability

## Sample Paper – 10

Duration: 45 Minutes

Maximum Marks: 60

### Instructions

- This paper contains **30** Multiple Choice Questions (Single Correct Answer), modelled on the **Reasoning Ability** section of the **RIE CEE** (NCERT Regional Institutes of Education Common Entrance Exam).
- Each correct answer carries **+2 marks**. There is a penalty of **-0.5 mark** for every incorrect answer. Unattempted questions carry **0 marks**.
- Only **one** option is correct. Choose carefully before marking, since wrong answers are penalised.
- The actual exam is a **Computer Based Test (CBT)**; attempt this paper in one timed sitting of 45 minutes.
- Use of mobile phones, calculators, or electronic gadgets is not permitted.

**Q1.** Find the next term in the series: 5, 8, 4, 9, 3, ?

- (A) 11
- (B) 10
- (C) 12
- (D) 7

**Q2.** Find the next term in the series: 0, 7, 26, 63, 124, ?

- (A) 211
- (B) 217
- (C) 213
- (D) 215



- Q3.** Find the next term in the letter series:  $B, H, N, T, ?$
- (A) A
  - (B) B
  - (C) Z
  - (D) Y
- Q4.** Find the next term in the series: 4, 10, 28, 82, ?
- (A) 244
  - (B) 240
  - (C) 246
  - (D) 250
- Q5.** Find the next term in the series:  $Z1, X4, V9, T16, ?$
- (A) S25
  - (B) R24
  - (C) Q25
  - (D) R25
- Q6.**  $3 : 26 :: 5 : ?$
- (A) 120
  - (B) 124
  - (C) 125
  - (D) 130
- Q7.** If  $MAP : SGV$ , then  $RED : ?$
- (A) XKJ
  - (B) XJK
  - (C) WKJ



(D) XKI

**Q8.** Premchand is to Godan as Tagore is to:

- (A) Poet
- (B) Painting
- (C) Gitanjali
- (D) Bengal

**Q9.** Choose the number that does not belong with the others: 16, 32, 48, 64, 128

- (A) 32
- (B) 64
- (C) 128
- (D) 48

**Q10.** Choose the odd letter pair:

- (A) CH
- (B) EI
- (C) KO
- (D) PT

**Q11.** Choose the word that does not belong with the others:

- (A) Copper
- (B) Iron
- (C) Sulphur
- (D) Zinc

**Q12.** In a certain code, *SUN* is written as *YAT*. How is *RAIN* written in that code?

- (A) XHOT



- (B) XGOT
- (C) WGOT
- (D) XGNT

**Q13.** If each letter is coded by its position in the English alphabet, then *DESK* is coded as:

- (A) 4-5-19-12
- (B) 4-6-19-11
- (C) 3-5-19-11
- (D) 4-5-19-11

**Q14.** In a code language *TIGER* is written as *VKIGT*. How is *PLANT* written in the same code?

- (A) RNCPV
- (B) RNCPU
- (C) RMCPV
- (D) QNCPV

**Q15.** Pointing to a photograph, a woman said, “He is the only son of the mother of my father.” How is the man in the photograph related to the woman?

- (A) Brother
- (B) Father
- (C) Uncle
- (D) Grandfather

**Q16.** P is the son of Q. R is the father of Q. S is the wife of R. How is P related to S?

- (A) Son



- (B) Nephew
- (C) Grandson
- (D) Father

**Q17.** Meena said, “This boy is the son of my father’s mother’s only son.” How is the boy related to Meena?

- (A) Cousin
- (B) Nephew
- (C) Uncle
- (D) Brother

**Q18.** Statements: All ducks are birds. All birds are creatures.

Conclusions: I. All ducks are creatures. II. Some creatures are ducks.

- (A) Only I follows
- (B) Only II follows
- (C) Both I and II follow
- (D) Neither I nor II follows

**Q19.** Statements: Some benches are tables. All tables are furniture.

Conclusions: I. Some benches are furniture. II. All furniture are tables.

- (A) Both I and II follow
- (B) Only I follows
- (C) Only II follows
- (D) Neither I nor II follows

**Q20.** Statements: No writer is lazy. All authors are writers.

Conclusions: I. No author is lazy. II. Some writers are authors.

- (A) Only I follows
- (B) Only II follows



- (C) Both I and II follow
- (D) Neither I nor II follows

**Q21.** Statement: A large number of children in a slum area have dropped out of the local school before completing primary education.

Courses of action: I. The school should be permanently shut down.  
II. A bridge course with mid-day meals should be started to bring the dropouts back to school.

- (A) Only I follows
- (B) Only II follows
- (C) Neither I nor II follows
- (D) Both I and II follow

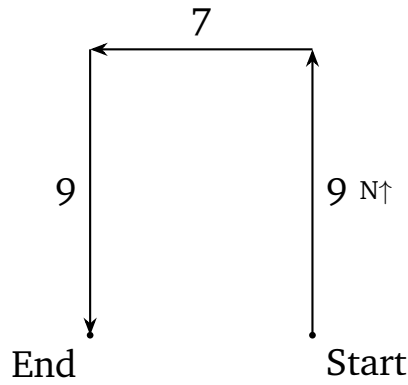
**Q22.** Statement: “Order now and get hot meals delivered to your home within 30 minutes.” — an advertisement by a restaurant.

Assumptions: I. People are willing to order food for home delivery. II. The restaurant can deliver meals within the promised time.

- (A) Both I and II are implicit
- (B) Only I is implicit
- (C) Only II is implicit
- (D) Neither I nor II is implicit

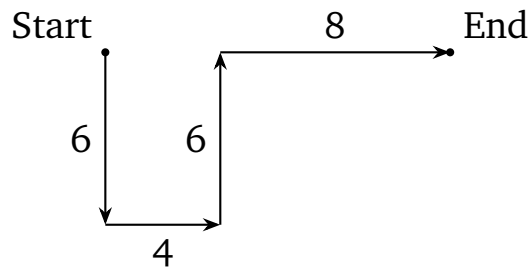
**Q23.** A man starts from a point, walks 9 km North, turns left and walks 7 km, then turns left again and walks 9 km. How far and in which direction is he now from the starting point?





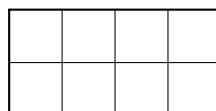
- (A) 9 km West
- (B) 7 km West
- (C) 7 km East
- (D) 16 km West

**Q24.** A girl walks 6 m South, turns left and walks 4 m, turns left and walks 6 m, then turns right and walks 8 m. How far is she from the starting point?



- (A) 12 m East
- (B) 8 m East
- (C) 4 m East
- (D) 6 m East

**Q25.** How many squares are there in the figure given below?



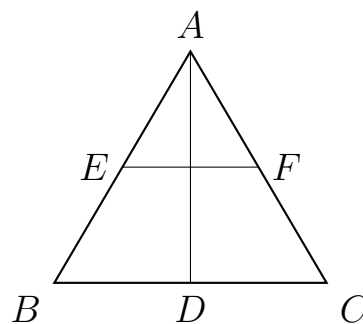
- (A) 8
- (B) 10
- (C) 9
- (D) 11

**Q26.** The arrow rotates by a fixed angle. Which direction should the arrow point in the next figure?



- (A) ↘ (points South-East)
- (B) → (points East)
- (C) ↑ (points North)
- (D) ↗ (points North-East)

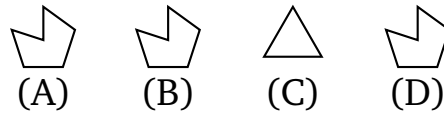
**Q27.** How many triangles are there in the figure given below? (The figure is a triangle  $ABC$  with a median  $AD$  to the base and a midline  $EF$  joining the midpoints of the two sides.)



- (A) 5
- (B) 6
- (C) 7
- (D) 8



**Q28.** Choose the figure that is different from the other three.



- (A) Figure A
- (B) Figure B
- (C) Figure C
- (D) Figure D

**Q29.** Five people W, X, Y, Z and A are sitting in a row facing North. Y is at the extreme left end. A is at the extreme right end. Z is to the immediate left of A. W is between Y and X. Who is sitting exactly in the middle of the row?

- (A) W
- (B) Y
- (C) Z
- (D) X

**Q30.** In a class of 48 students, Anil's rank is 19th from the top. What is his rank from the bottom?

- (A) 30th
- (B) 29th
- (C) 31st
- (D) 28th



## Detailed Solutions

Q1.

## Solution

**Concept — Number series (two alternating sub-series):** When the terms zig-zag up and down, split them into the odd-position and even-position terms.

**Step 1 — Odd positions:** The 1st, 3rd and 5th terms are 5, 4, 3, decreasing by 1 each time.

**Step 2 — Even positions:** The 2nd and 4th terms are 8, 9, increasing by 1 each time.

**Step 3 — Find the next term:** The next term is in an even position, so it continues 8, 9, ... The next value is  $9 + 1 = 10$ .

**Why other options are wrong:**

- 11 and 12 over-shoot the even sub-series; 7 belongs to neither pattern.

**Final Answer:** The next term is 10  $\Rightarrow$  **B**

**Answer: (B)** [Go Back to Q1](#)

Q2.

## Solution

**Concept — Number series (cubes minus one):** Compare each term with the perfect cubes 1, 8, 27, 64, ...

**Step 1 — Match the cubes:**  $1^3 - 1 = 0$ ,  $2^3 - 1 = 7$ ,  $3^3 - 1 = 26$ ,  $4^3 - 1 = 63$ ,  $5^3 - 1 = 124$ .

**Step 2 — The rule:** Each term is  $n^3 - 1$  for  $n = 1, 2, 3, 4, 5, \dots$

**Step 3 — Apply for  $n = 6$ :**  $6^3 - 1 = 216 - 1 = 215$ .

**Why other options are wrong:**

- 217 is  $6^3 + 1$ ; 211 and 213 do not match  $n^3 - 1$ .

**Final Answer:** The next term is 215  $\Rightarrow$  **D**

**Answer: (D)** [Go Back to Q2](#)



Q3.

**Solution**

**Concept — Letter series (fixed gap with wrap):** Convert letters to positions and add a constant gap, wrapping past  $Z$  back to  $A$ .

**Step 1 — Positions:**  $B = 2, H = 8, N = 14, T = 20$ .

**Step 2 — Gap:**  $8 - 2 = 6, 14 - 8 = 6, 20 - 14 = 6$ . The gap is  $+6$  each time.

**Step 3 — Next letter:**  $20 + 6 = 26 = Z$ .

**Why other options are wrong:**

- $A$  would need a wrap to  $27$ ;  $Y(25)$  and  $B(2)$  use the wrong gap.

**Final Answer:** The next letter is  $Z \Rightarrow \boxed{C}$

**Answer: (C)** [Go Back to Q3](#)

Q4.

**Solution**

**Concept — Number series (multiply and add):** Test a rule of the form “previous term  $\times a + b$ ”.

**Step 1 — Test  $\times 3 - 2$ :**  $4 \times 3 - 2 = 10; 10 \times 3 - 2 = 28; 28 \times 3 - 2 = 82$ .

**Step 2 — The rule holds:** Each term is (previous  $\times 3$ )  $- 2$ .

**Step 3 — Apply to the last term:**  $82 \times 3 - 2 = 246 - 2 = 244$ .

**Why other options are wrong:**

- $246$  forgets the  $-2$ ;  $240$  and  $250$  do not follow  $\times 3 - 2$ .

**Final Answer:** The next term is  $244 \Rightarrow \boxed{A}$

**Answer: (A)** [Go Back to Q4](#)



Q5.

**Solution**

**Concept — Alphanumeric series:** Treat the letter part and the number part as two separate series.

**Step 1 — Letters:**  $Z, X, V, T$  decrease by 2 each time (26, 24, 22, 20), so the next is  $R$  (18).

**Step 2 — Numbers:** 1, 4, 9, 16 are the perfect squares  $1^2, 2^2, 3^2, 4^2$ , so the next is  $5^2 = 25$ .

**Step 3 — Combine:** The next term is  $R25$ .

**Why other options are wrong:**

- S25 and Q25 use the wrong letter; R24 uses the wrong number.

**Final Answer:** The next term is  $R25 \Rightarrow$

**Answer: (D)** [Go Back to Q5](#)

Q6.

**Solution**

**Concept — Number analogy (cube minus one):** Find the rule connecting the first pair, then apply it to the second.

**Step 1 — Rule:**  $3^3 - 1 = 27 - 1 = 26$ , that is  $n^3 - 1$ .

**Step 2 — Apply:** For 5:  $5^3 - 1 = 125 - 1 = 124$ .

**Why other options are wrong:**

- 125 is  $5^3$  without the  $-1$ ; 120 and 130 do not match  $n^3 - 1$ .

**Final Answer:**  $5 : 124 \Rightarrow$

**Answer: (B)** [Go Back to Q6](#)



Q7.

**Solution**

**Concept — Letter analogy (shift +6 with wrap):** Compare each letter's position shift between the two words.

**Step 1 — Find the shift:**  $M(13) \rightarrow S(19)$  is +6;  $A(1) \rightarrow G(7)$  is +6;  $P(16) \rightarrow V(22)$  is +6. The rule is +6 to each letter.

**Step 2 — Apply to RED:**  $R(18) \rightarrow X(24)$ ;  $E(5) \rightarrow K(11)$ ;  $D(4) \rightarrow J(10)$ , giving  $XKJ$ .

**Why other options are wrong:**

- $XJK$  swaps two letters;  $WKJ$  and  $XKI$  shift one letter wrongly.

**Final Answer:**  $RED \rightarrow XKJ \Rightarrow \boxed{A}$

**Answer: (A)** [Go Back to Q7](#)

Q8.

**Solution**

**Concept — Word analogy (author : book):** Match each writer to the famous work he created.

**Step 1 — First pair:** Premchand wrote the novel *Godan*.

**Step 2 — Apply:** Rabindranath Tagore wrote *Gitanjali*, so Tagore  $\rightarrow$  Gitanjali.

**Why other options are wrong:**

- Poet describes Tagore, not a work; Painting and Bengal are not the matching creation.

**Final Answer:** Tagore is to Gitanjali  $\Rightarrow \boxed{C}$

**Answer: (C)** [Go Back to Q8](#)



Q9.

**Solution**

**Concept — Classification of numbers:** Look for a single property shared by all but one.

**Step 1 — Test for powers of 2:**  $32 = 2^5$ ,  $64 = 2^6$ ,  $128 = 2^7$ ,  $16 = 2^4$ .

**Step 2 — Check 48:**  $48 = 16 \times 3$  is not a power of 2 (it lies between 32 and 64).

**Step 3 — Conclusion:** 48 is the odd one out.

**Why other options are wrong:**

- 32, 64 and 128 are all exact powers of 2, so they belong together.

**Final Answer:** 48 does not belong  $\Rightarrow$

**Answer: (D)** [Go Back to Q9](#)

Q10.

**Solution**

**Concept — Letter-pair classification:** Find the gap between the two letters of each pair.

**Step 1 — Gaps:**  $CH: C(3) \rightarrow H(8)$ , gap 5.  $EI: E(5) \rightarrow I(9)$ , gap 4.  $KO: K(11) \rightarrow O(15)$ , gap 4.  $PT: P(16) \rightarrow T(20)$ , gap 4.

**Step 2 — Conclusion:** Three pairs have a gap of 4;  $CH$  has a gap of 5, so it is the odd one.

**Why other options are wrong:**

- $EI$ ,  $KO$  and  $PT$  all have a gap of 4 between the letters.

**Final Answer:**  $CH$  is the odd pair  $\Rightarrow$

**Answer: (A)** [Go Back to Q10](#)



Q11.

**Solution**

**Concept — Word classification:** Group the items by category and find the outsider.

**Step 1 — Identify the items:** Copper, Iron and Zinc are all metals.

**Step 2 — The outsider:** Sulphur is a non-metal, not a metal.

**Why other options are wrong:**

- Copper, Iron and Zinc share the category “metal”.

**Final Answer:** Sulphur does not belong  $\Rightarrow$

[Go Back to Q11](#)

Q12.

**Solution**

**Concept — Coding by letter shift:** Find the constant shift from each plain letter to its code, then rebuild the new word.

**Step 1 — Find the shift:** In  $SUN \rightarrow YAT$ , check letter by letter:  $S(19) \rightarrow Y(25)$  is +6;  $U(21) \rightarrow A(27 \rightarrow 1)$  is +6 with wrap past Z;  $N(14) \rightarrow T(20)$  is +6. So each letter shifts +6.

**Step 2 — Apply to RAIN:**  $R(18) \rightarrow X(24)$ ;  $A(1) \rightarrow G(7)$ ;  $I(9) \rightarrow O(15)$ ;  $N(14) \rightarrow T(20)$ , giving  $XGOT$ .

**Why other options are wrong:**

- XHOT shifts A wrongly; WGOT shifts R wrongly; XGNT shifts I wrongly.

**Final Answer:**  $RAIN \rightarrow XGOT \Rightarrow$

[Go Back to Q12](#)



Q13.

**Solution**

**Concept — Positional coding:** Replace each letter by its position number ( $A = 1, B = 2, \dots, Z = 26$ ).

**Step 1 — Decode each letter:**  $D = 4, E = 5, S = 19, K = 11$ .

**Step 2 — Write the code:**  $DESK = 4-5-19-11$ .

**Why other options are wrong:**

- 4-5-19-12 puts  $K = 12$ ; 4-6-19-11 puts  $E = 6$ ; 3-5-19-11 puts  $D = 3$ .

**Final Answer:**  $DESK = 4-5-19-11 \Rightarrow \boxed{D}$

**Answer: (D)** [Go Back to Q13](#)

Q14.

**Solution**

**Concept — Coding by fixed shift:** Determine the shift from *TIGER* to *VKIGT* and reuse it.

**Step 1 — Find the shift:**  $T \rightarrow V (+2), I \rightarrow K (+2), G \rightarrow I (+2), E \rightarrow G (+2), R \rightarrow T (+2)$ . The shift is  $+2$ .

**Step 2 — Apply to PLANT:**  $P \rightarrow R, L \rightarrow N, A \rightarrow C, N \rightarrow P, T \rightarrow V$ , giving *RNCPV*.

**Why other options are wrong:**

- RNCPU, RMCPV and QNCPV each have one letter shifted wrongly.

**Final Answer:**  $PLANT \rightarrow RNCPV \Rightarrow \boxed{A}$

**Answer: (A)** [Go Back to Q14](#)



Q15.

**Solution**

**Concept — Blood relations (work inwards):** Break the statement into small steps, starting from the innermost phrase.

**Step 1 — “the mother of my father”:** This person is the woman’s paternal grandmother.

**Step 2 — “the only son of (my paternal grandmother)”:** The grandmother’s only son is the woman’s own father.

**Why other options are wrong:**

- Brother, Uncle and Grandfather do not match “grandmother’s only son”.

**Final Answer:** The man is the woman’s father  $\Rightarrow$  **B**

**Answer: (B)** [Go Back to Q15](#)

Q16.

**Solution**

**Concept — Blood relations (build the tree):** Lay out each clue as a link in a family tree.

**Step 1 — Note the links:** P is the son of Q. R is the father of Q, so R is P’s grandfather. S is the wife of R, so S is P’s grandmother.

**Step 2 — Relate P to S:** P is the son of S’s son Q, so P is S’s grandson.

**Why other options are wrong:**

- Son skips a generation; Nephew is the wrong branch; Father reverses the generation.

**Final Answer:** P is S’s grandson  $\Rightarrow$  **C**

**Answer: (C)** [Go Back to Q16](#)



Q17.

**Solution**

**Concept — Blood relations (decode the phrase):** Resolve “father’s mother’s only son” first.

**Step 1 — “my father’s mother”:** This is Meena’s paternal grandmother.

**Step 2 — “the only son of (my paternal grandmother)”:** The grandmother’s only son is Meena’s own father.

**Step 3 — “the son of (my father)”:** The son of Meena’s father is Meena’s brother.

**Why other options are wrong:**

- Cousin, Nephew and Uncle do not match “father’s son”.

**Final Answer:** The boy is Meena’s brother  $\Rightarrow$

[Go Back to Q17](#)

Q18.

**Solution**

**Concept — Syllogism (chain rule):** “All A are B” plus “All B are C” gives “All A are C”.

**Step 1 — Conclusion I:** All ducks are birds and all birds are creatures, so all ducks are creatures. I follows.

**Step 2 — Conclusion II:** If all ducks are creatures, then those ducks are creatures, so some creatures are ducks. II follows (valid conversion of “all”).

**Why other options are wrong:**

- Any option dropping I or II is wrong, since both conclusions are valid.

**Final Answer:** Both I and II follow  $\Rightarrow$

[Go Back to Q18](#)



Q19.

**Solution**

**Concept — Syllogism (some + all):** “Some A are B” plus “All B are C” gives “Some A are C”.

**Step 1 — Conclusion I:** Some benches are tables, and all tables are furniture, so those benches are furniture. “Some benches are furniture” follows.

**Step 2 — Conclusion II:** “All furniture are tables” reverses the given “all tables are furniture” and is not valid.

**Why other options are wrong:**

- Options including II are wrong because the reverse statement does not follow.

**Final Answer:** Only I follows  $\Rightarrow$

**Answer: (B)** [Go Back to Q19](#)

Q20.

**Solution**

**Concept — Syllogism (no + all):** Combine a negative statement with a universal one.

**Step 1 — Conclusion I:** All authors are writers and no writer is lazy, so no author can be lazy. I follows.

**Step 2 — Conclusion II:** All authors are writers, so the authors are writers; hence “some writers are authors” follows.

**Why other options are wrong:**

- Any option dropping I or II is wrong, since both conclusions are valid.

**Final Answer:** Both I and II follow  $\Rightarrow$

**Answer: (C)** [Go Back to Q20](#)



Q21.

**Solution**

**Concept — Course of action:** A course of action should be practical and should genuinely address the problem.

**Step 1 — Course I:** Shutting the school down removes the only schooling option and worsens the dropout problem, so it does not follow.

**Step 2 — Course II:** A bridge course with mid-day meals gives the dropouts a reason and means to return, directly tackling the problem, so it follows.

**Why other options are wrong:**

- Any option accepting I is wrong; closing the school does not help the children.

**Final Answer:** Only II follows ⇒

**Answer: (B)** [Go Back to Q21](#)

Q22.

**Solution**

**Concept — Implicit assumptions:** An assumption is something taken for granted that must be true for the statement to make sense.

**Step 1 — Assumption I:** Advertising home delivery assumes that at least some people are willing to order food for delivery; otherwise the offer is pointless. I is implicit.

**Step 2 — Assumption II:** Promising delivery within 30 minutes assumes the restaurant can actually meet that time; otherwise it would not make the promise. II is implicit.

**Why other options are wrong:**

- Dropping either assumption is wrong, since both underlie the advertisement.

**Final Answer:** Both I and II are implicit ⇒

**Answer: (A)** [Go Back to Q22](#)



Q23.

**Solution**

**Concept — Direction sense (net displacement):** Track each leg on a grid and combine the moves.

**Step 1 — Leg 1:** 9 km North.

**Step 2 — Turn left, Leg 2:** Facing North, a left turn points West; walk 7 km West.

**Step 3 — Turn left, Leg 3:** Facing West, a left turn points South; walk 9 km South. The 9 km South cancels the 9 km North.

**Step 4 — Net position:** Only the 7 km West remains, so he is 7 km West of the start.

**Why other options are wrong:**

- 9 km West and 16 km West add wrong legs; 7 km East reverses the direction.

**Final Answer:** 7 km West  $\Rightarrow$

**Answer: (B)** [Go Back to Q23](#)

Q24.

**Solution**

**Concept — Direction sense (cancel opposite legs):** North and South distances cancel; East and West distances cancel.

**Step 1 — List the legs:** 6 m South, then 4 m East (left turn while facing South), then 6 m North (left turn while facing East), then 8 m East (right turn while facing North).

**Step 2 — Vertical movement:** 6 m South and 6 m North cancel out.

**Step 3 — Horizontal movement:** 4 m East + 8 m East = 12 m East.

**Why other options are wrong:**

- 4 m and 8 m use only one horizontal leg; 6 m wrongly adds a vertical leg.

**Final Answer:** 12 m East  $\Rightarrow$

**Answer: (A)** [Go Back to Q24](#)



Q25.

**Solution**

**Concept — Counting squares:** Count squares of every possible size, not just the smallest.

**Step 1 — Unit squares:** The grid is  $4 \times 2$ , giving  $4 \times 2 = 8$  unit ( $1 \times 1$ ) squares.

**Step 2 — Larger squares:** A  $2 \times 2$  square needs a 2-tall block, and the grid is exactly 2 tall. Sliding a  $2 \times 2$  block across the 4-wide grid gives 3 positions.

**Step 3 — Total:**  $8 + 3 = 11$  squares.

**Why other options are wrong:**

- 8 counts only the unit squares; 9 and 10 miss one of the  $2 \times 2$  squares.

**Final Answer:** 11 squares  $\Rightarrow$

**Answer: (D)** [Go Back to Q25](#)

Q26.

**Solution**

**Concept — Figure series (rotation):** Identify the fixed angle of rotation between successive figures.

**Step 1 — Read the figures:** The arrow points North, then North-East, then East — a  $45^\circ$  clockwise turn each step.

**Step 2 — Next figure:** A further  $45^\circ$  clockwise turn from East points South-East.

**Why other options are wrong:**

- East and North-East repeat earlier figures; North reverses the rotation.

**Final Answer:** The arrow points South-East  $\Rightarrow$

**Answer: (A)** [Go Back to Q26](#)



Q27.

**Solution**

**Concept — Counting triangles:** List every triangle whose three sides each lie along a drawn line. The drawn lines are the three sides  $AB, AC, BC$ , the median  $AD$  and the midline  $EF$ . Note  $AD$  and  $EF$  meet at a point  $G$ , while  $EF$  is parallel to  $BC$  (so they never form a triangle together).

**Step 1 — Smallest triangles (above the midline):** The midline  $EF$  and median  $AD$  split the top into two:  $\triangle AEG$  and  $\triangle AGF$ . That is 2 triangles.

**Step 2 — Triangle above the whole midline:**  $\triangle AEF$  (sides  $AE$  on  $AB$ ,  $AF$  on  $AC$ , base  $EF$ ). That is 1 more.

**Step 3 — The two half-triangles from the median:**  $\triangle ABD$  (left half) and  $\triangle ACD$  (right half). That is 2 more.

**Step 4 — The whole triangle:**  $\triangle ABC$  itself. That is 1 more.

**Step 5 — Total:**  $2+1+2+1 = 6$  triangles. (The lower regions  $EBDG$  and  $GDCF$  are quadrilaterals, not triangles, because  $EF \parallel BC$ .)

**Why other options are wrong:**

- 5 misses one triangle; 7 and 8 wrongly count the lower quadrilaterals as triangles.

**Final Answer:** 6 triangles  $\Rightarrow$

**Answer:** (B) [Go Back to Q27](#)

Q28.

**Solution**

**Concept — Odd figure out:** Compare the shapes and find the one with a different form.

**Step 1 — Compare:** Figures A, B and D are five-sided pentagons; figure C is a three-sided triangle.

**Step 2 — Conclusion:** The triangle is the odd figure.

**Why other options are wrong:**

- A, B and D are all pentagons of the same kind, so they belong together.

**Final Answer:** Figure C is different  $\Rightarrow$



**Answer: (C)** [Go Back to Q28](#)

**Q29.**

### Solution

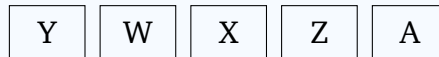
**Concept — Linear seating:** Fix the ends first, then place the remaining people using the clues.

**Step 1 — Ends:** Y is at the extreme left (position 1) and A is at the extreme right (position 5).

**Step 2 — Place Z:** Z is to the immediate left of A, so Z is at position 4.

**Step 3 — Place W and X:** W is between Y and X, and the only seats left are positions 2 and 3. So W is at position 2 and X is at position 3.

**Step 4 — Read the order:** The row is Y, W, X, Z, A; the middle seat (position 3) is X.



**Why other options are wrong:**

- W is at position 2, Z at position 4 and Y at the end — none is in the middle.

**Final Answer:** X sits in the middle  $\Rightarrow$  **D**

**Answer: (D)** [Go Back to Q29](#)

**Q30.**

### Solution

**Concept — Rank from the other end:** For a single line, rank from top + rank from bottom = total + 1.

**Step 1 — Known values:** Total students = 48, rank from top = 19.

**Step 2 — Apply the formula:** Rank from bottom =  $48 - 19 + 1 = 30$ .

**Why other options are wrong:**

- 29 forgets the “+1”; 31 and 28 misapply the formula.

**Final Answer:** Anil’s rank from the bottom is 30th  $\Rightarrow$  **A**



**Answer: (A)** [Go Back to Q30](#)



## Answer Key

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

