

SCO INTERNATIONAL OLYMPIAD

CLASS 7 MATHS OLYMPIAD OFFICIAL PAPER

A professional question paper with answer key and explanations

A polished official question paper designed for Class 7 mathematical reasoning, case-based application, and Olympiad readiness.

- age-fit mathematics reasoning for Class 7 learners globally
- question blocks with compact professional question-number tags
- answer keys and explanations included for transparent learning and review

Maths	English	Science	Mental Ability	Finance Knowledge
AI	Entrepreneurship	GK	Coding	Life Skills

Candidate Guidelines

Class	7
Exam	SCO International Maths Olympiad
Duration	60 minutes
Question Type	Objective multiple-choice questions
Marking	+1 for every correct answer; no negative marking unless announced by the examination authority
Sections	General Mathematics, Case Study, Reason/Assertion, and Achievers Section

General Mathematics

Q.1 If $x + 1/x = 5$, find the value of $x^2 + 1/x^2$.

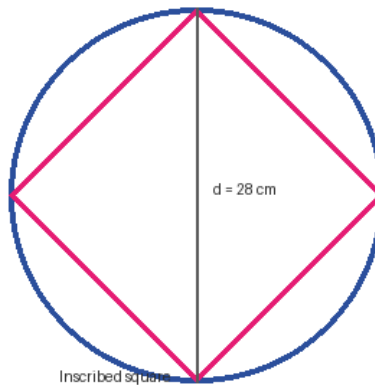
- A. 21
- B. 23
- C. 25
- D. 27

Answer

B. 23

Explanation: Squaring $x + 1/x = 5$ gives $x^2 + 2 + 1/x^2 = 25$. Hence $x^2 + 1/x^2 = 25 - 2 = 23$.

Q.2 The radius of a circle is 14 cm. A square is inscribed in the circle. What is the area of the square?



- A. 196 cm^2
- B. 784 cm^2
- C. 392 cm^2
- D. 448 cm^2

Answer

C. 392 cm^2

Explanation: The diagonal of the square equals the diameter of the circle = 28 cm. Area of a square using diagonal d is $d^2/2 = 28^2/2 = 392 \text{ cm}^2$.

Q.3 What is the smallest 3-digit number divisible by 3, 5, and 7?

- A. 105
- B. 210
- C. 315
- D. 420

Answer

A. 105

Explanation: Since 3, 5, and 7 are pairwise coprime, their LCM is $3 \times 5 \times 7 = 105$, which is already a 3-digit number.

Q.4 A milk vendor mixes milk and water in the ratio 5:3. He sells the mixture at ₹48 per liter and makes a 20% profit. What is the cost price of pure milk per liter if water is free?

- A. ₹48
- B. ₹60
- C. ₹64
- D. ₹72

Answer

C. ₹64

Explanation: Selling price of mixture is ₹48 with 20% profit, so cost price of mixture = $48/1.20 = ₹40$. Only 5/8 of the mixture is milk, so milk cost per liter = $40 \times 8/5 = ₹64$.

Q.5 The average of 10 numbers is 25. If the smallest number is removed, the new average becomes 27. What is the smallest number?

- A. 7
- B. 12
- C. 15
- D. 18

Answer

A. 7

Explanation: Original total = $10 \times 25 = 250$. New total = $9 \times 27 = 243$. Removed number = $250 - 243 = 7$.

Q.6 If $x = 3$ and $y = 2$, evaluate $2x^3 + 3y^2 - 5xy$.

- A. 32
- B. 36
- C. 40
- D. 44

Answer

B. 36

Explanation: $2(3^3) + 3(2^2) - 5(3)(2) = 54 + 12 - 30 = 36$.

Q.7 A cuboid has dimensions 4 cm × 5 cm × 10 cm. A cylindrical cavity of radius 2 cm and depth 5 cm is cut from one 4 cm × 5 cm face. What is the approximate surface area of the resulting solid? Use $\pi = 22/7$.

- A. 252.50 cm²
- B. 270.29 cm²

- C. 300.00 cm²
- D. 320.50 cm²

Answer

B. 270.29 cm²

Explanation: Original surface area = $2(lb + bh + lh) = 2(20 + 50 + 40) = 220 \text{ cm}^2$. Cutting the cavity removes one circular opening $\pi r^2 = 88/7$ and adds curved area $2\pi rh = 440/7$. New area = $220 - 88/7 + 440/7 \approx 270.29 \text{ cm}^2$.

Q.8 A jug contains $3/5$ liter of milk. If $1/4$ of the milk is spilled and then $1/10$ liter of milk is added, how much milk is left?

- A. $9/20$ liter
- B. $11/20$ liter
- C. $13/20$ liter
- D. $17/20$ liter

Answer

B. $11/20$ liter

Explanation: Spilled amount = $(1/4)(3/5) = 3/20$. Remaining = $3/5 - 3/20 = 9/20$. After adding $1/10 = 2/20$, total = $11/20$ liter.

Q.9 A rectangular garden measures $12 \text{ m} \times 8 \text{ m}$. A path 1 m wide is built along the edges inside the garden. What is the area of the remaining central garden?

- A. 60 m^2
- B. 72 m^2
- C. 84 m^2
- D. 96 m^2

Answer

A. 60 m^2

Explanation: The path reduces each dimension by 2 m . Remaining dimensions = $10 \text{ m} \times 6 \text{ m}$. Area = 60 m^2 .

Q.10 A father divides ₹7,200 among his three sons in the ratio $3:2:1$. If the youngest son invests all his money at 5% per annum simple interest for 3 years, how much interest does he earn?

- A. ₹150
- B. ₹180
- C. ₹200
- D. ₹250

Answer

B. ₹180

Explanation: Youngest share = $1/(3+2+1) \times 7200 = ₹1,200$. Simple interest = $PRT/100 = 1200 \times 5 \times 3 / 100 = ₹180$.

Case Study Based Questions

Q.11 Five friends rented a boat for 3 hours at ₹180 per hour and bought snacks worth ₹360. Two friends paid only half of their normal equal share. The remaining amount was shared equally by the other three friends. How much did each of the remaining three friends pay?

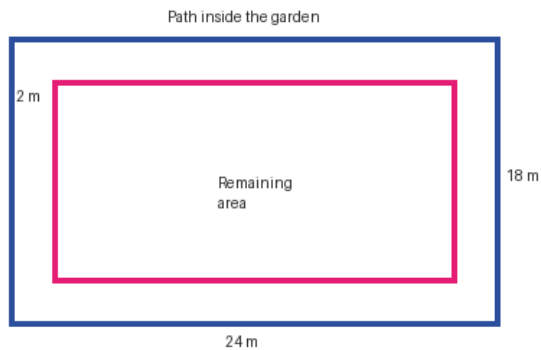
- A. ₹180
- B. ₹240
- C. ₹270
- D. ₹300

Answer

B. ₹240

Explanation: Total expense = $3 \times 180 + 360 = ₹900$. Equal share = $900/5 = ₹180$. Two friends pay half, i.e., ₹90 each, so they pay ₹180 together. Remaining amount = ₹720. Each of the other three pays $720/3 = ₹240$.

Q.12 A rectangular garden measures $24 \text{ m} \times 18 \text{ m}$. A path 2 m wide runs along the edges inside the garden. The remaining area is to be tiled at ₹50 per square meter. What is the total tiling cost?



- A. ₹14,000
- B. ₹16,000
- C. ₹18,000
- D. ₹20,000

Answer

A. ₹14,000

Explanation: Remaining dimensions = $(24 - 4) \text{ m} \times (18 - 4) \text{ m} = 20 \text{ m} \times 14 \text{ m}$. Remaining area = 280 m^2 . Cost = $280 \times 50 = ₹14,000$.

Q.13 A rectangular water tank measures $2 \text{ m} \times 1.5 \text{ m} \times 1.2 \text{ m}$. It is filled at 20 liters per minute for 4 hours. What percentage of water overflows compared with the tank capacity?

- A. 25%
- B. 33.33%
- C. 50%
- D. 66.67%

Answer

B. 33.33%

Explanation: Tank capacity = $2 \times 1.5 \times 1.2 = 3.6 \text{ m}^3 = 3,600$ liters. Water supplied = $20 \times 240 = 4,800$ liters. Overflow = 1,200 liters. Percentage overflow = $1200/3600 \times 100 = 33.33\%$.

Q.14 A store gives 20% discount on purchases above ₹500 and an additional 10% off on the discounted price for purchases above ₹1,000. Sarah buys items worth ₹1,200. How much does she pay?

- A. ₹920
- B. ₹864
- C. ₹960
- D. ₹880

Answer

B. ₹864

Explanation: After 20% discount: $1200 \times 0.80 = ₹960$. Additional 10% off: $960 \times 0.90 = ₹864$.

Q.15 Riya and Priya can paint a wall in 6 hours and 4 hours respectively. They work together for 2 hours, then Riya leaves. How much total time is needed to finish the wall?

- A. 2 hours 40 minutes
- B. 3 hours
- C. 3 hours 30 minutes
- D. 4 hours

Answer

A. 2 hours 40 minutes

Explanation: Together rate = $1/6 + 1/4 = 5/12$ wall per hour. In 2 hours they complete $10/12 = 5/6$. Remaining = $1/6$. Priya alone paints at $1/4$ per hour, so time = $(1/6)/(1/4) = 2/3$ hour = 40 minutes. Total = 2 hours 40 minutes.

Q.16 Anjali is 3 years older than Sam. The sum of their ages is 35 years. How old is Anjali?

- A. 18 years
- B. 19 years
- C. 20 years
- D. 22 years

Answer

B. 19 years

Explanation: Let Sam's age be x . Then Anjali's age = $x + 3$. So $x + x + 3 = 35$, giving $x = 16$. Anjali is 19 years old.

Q.17 A train moves at 72 km/h. Its length is 120 m and it crosses a platform of length 240 m. How long will it take to cross the platform?

- A. 12 seconds
- B. 14 seconds
- C. 16 seconds
- D. 18 seconds

Answer

D. 18 seconds

Explanation: Speed 72 km/h = 20 m/s. Total distance = train length + platform length = 120 + 240 = 360 m. Time = $360/20 = 18$ seconds.

Q.18 A box contains 6 red, 8 blue, and 10 green cards. One card is drawn randomly. What is the probability that the card drawn is not blue?

- A. $2/3$
- B. $3/5$
- C. $5/8$
- D. $7/10$

Answer

A. $2/3$

Explanation: Total cards = 24. Not blue cards = red + green = 16. Probability = $16/24 = 2/3$.

Q.19 A shopkeeper sells a watch at ₹3,000. If the cost price is ₹2,500, what is the profit percentage?

- A. 18%
- B. 20%
- C. 25%
- D. 30%

Answer

B. 20%

Explanation: Profit = $3000 - 2500 = ₹500$. Profit percent = $500/2500 \times 100 = 20\%$.

Q.20 A pipe can fill a tank in 6 hours. Another pipe can empty the same tank in 8 hours. If both pipes are opened together, how long will it take to fill the tank?

- A. 12 hours
- B. 24 hours
- C. $24/5$ hours
- D. 30 hours

Answer

B. 24 hours

Explanation: Net filling rate = $1/6 - 1/8 = 1/24$ tank per hour. Thus the tank fills in 24 hours.

Q.21 Assertion (A): The product of two consecutive integers is always even.
Reason (R): One of the two consecutive integers is always divisible by 2.
Which option is correct?

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. Both A and R are false.

Answer

A. Both A and R are true, and R is the correct explanation of A.

Explanation: Among two consecutive integers, one is even, so the product contains a factor of 2.

Q.22 Assertion (A): In a parallelogram, the sum of the squares of the diagonals is equal to the sum of the squares of all four sides.
Reason (R): This property follows from applying the law of cosines to the triangles formed by a diagonal and adjacent sides.
Which option is correct?

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. Both A and R are false.

Answer

A. Both A and R are true, and R is the correct explanation of A.

Explanation: The parallelogram law states $d_1^2 + d_2^2 = 2(a^2 + b^2)$, which is the sum of squares of all four sides.

Q.23 Assertion (A): The sum of the interior angles of a hexagon is 720° .
Reason (R): The sum of the interior angles of an n-sided polygon is $(n - 2) \times 180^\circ$.
Which option is correct?

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. Both A and R are false.

Answer

A. Both A and R are true, and R is the correct explanation of A.

Explanation: For $n = 6$, the sum is $(6 - 2) \times 180^\circ = 720^\circ$.

Q.24 Assertion (A): If a triangle has sides 3, 4, and 5, it is a right-angled triangle.

Reason (R): A triangle is right-angled if the square of the longest side equals the sum of the squares of the other two sides. Which option is correct?

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. Both A and R are false.

Answer

A. Both A and R are true, and R is the correct explanation of A.

Explanation: Since $3^2 + 4^2 = 9 + 16 = 25 = 5^2$, the triangle is right-angled.

Q.25 Assertion (A): The volume of a sphere is given by $\frac{4}{3} \pi r^3$.

Reason (R): The formula for the volume of a sphere can be derived by summing circular slices across the sphere. Which option is correct?

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. Both A and R are false.

Answer

A. Both A and R are true, and R is the correct explanation of A.

Explanation: Both the formula and the reasoning are mathematically correct.

Q.26 Assertion (A): The discriminant of $ax^2 + bx + c = 0$ determines the nature of its roots.

Reason (R): If $D = b^2 - 4ac$ is positive, the quadratic equation has two distinct real roots.

Which option is correct?

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. Both A and R are false.

Answer

B. Both A and R are true, but R is not the correct explanation of A.

Explanation: Both statements are true, but the reason only explains one case of the discriminant test, not all possible root types.

Q.27 Assertion (A): In a parallelogram, the diagonals bisect each other at right angles if and only if the parallelogram is a rhombus.

Reason (R): In a rhombus, all sides are equal and the diagonals are perpendicular bisectors of each other.

Which option is correct?

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. Both A and R are false.

Answer

A. Both A and R are true, and R is the correct explanation of A.

Explanation: A rhombus has perpendicular diagonals, and a parallelogram with perpendicular diagonals is a rhombus.

Q.28 Assertion (A): The sum of the squares of any two consecutive even numbers is always divisible by 8.

Reason (R): The difference between the squares of any two consecutive even numbers is always divisible by 8.

Which option is correct?

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. Both A and R are false.

Answer

D. Both A and R are false.

Explanation: For 2 and 4, the sum of squares is 20 and the difference is 12; neither is divisible by 8.

Q.29 Assertion (A): A circle can have parallel tangents at the opposite ends of a diameter.

Reason (R): The tangent at any point on a circle is perpendicular to the radius drawn at that point.

Which option is correct?

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. Both A and R are false.

Answer

A. Both A and R are true, and R is the correct explanation of A.

Explanation: At opposite ends of the same diameter, the radii are collinear, so their perpendicular tangents are parallel.

Q.30 Assertion (A): For a cubic polynomial $P(x)$, if $x = 1$ is a root, then $x - 1$ is a factor of $P(x)$.

Reason (R): If $P(r) = 0$, then $x - r$ is a factor of $P(x)$ by the factor theorem.

Which option is correct?

- A. Both A and R are true, and R is the correct explanation of A.

- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. Both A and R are false.

Answer

A. Both A and R are true, and R is the correct explanation of A.

Explanation: The factor theorem directly explains the assertion.

Extended Case Study and Achievers Questions

Q.31 Anil buys a box of 15 pens for ₹120 and sells each pen for ₹15. What is his total profit after selling the entire box?

- A. ₹90
- B. ₹105
- C. ₹120
- D. ₹150

Answer

B. ₹105

Explanation: Selling price = $15 \times 15 = ₹225$. Profit = $225 - 120 = ₹105$.

Q.32 A four-sided field has side lengths 30 m, 50 m, 30 m, and 50 m. How much fencing is needed to enclose it?

- A. 120 m
- B. 140 m
- C. 160 m
- D. 180 m

Answer

C. 160 m

Explanation: Required fencing equals perimeter = $30 + 50 + 30 + 50 = 160$ m.

Q.33 Worker A can paint a wall in 6 hours and Worker B can paint it in 9 hours. If they work together, how long will they take?

- A. 3.6 hours
- B. 4 hours
- C. 5 hours
- D. 6 hours

Answer

A. 3.6 hours

Explanation: Combined rate = $\frac{1}{6} + \frac{1}{9} = \frac{5}{18}$ wall per hour. Time = $\frac{18}{5} = 3.6$ hours.

Q.34 A company produces T-shirts at ₹200 each and sells each for ₹350. If it sells x T-shirts, what is the expression for total profit?

- A. $350x - 200$
- B. $150x$
- C. $200x - 350$
- D. $350x - 200x^2$

Answer

B. $150x$

Explanation: Profit per shirt = $350 - 200 = ₹150$. Total profit for x shirts = $150x$.

Q.35 The scores are 45, 56, 78, 34, 56, 67, 89, 92, 45, 56. What is the mode?

- A. 45
- B. 56
- C. 67
- D. 92

Answer

B. 56

Explanation: The number 56 occurs three times, more often than any other score. Hence the mode is 56.

Q.36 A rectangular park is 60 m long and 40 m wide. A path of uniform width is constructed inside the edge and its area is 736 m^2 . What is the width of the path?

- A. 4 m
- B. 6 m
- C. 8 m
- D. 10 m

Answer

A. 4 m

Explanation: Remaining rectangle dimensions are $(60 - 2w)$ and $(40 - 2w)$. Path area = $2400 - (60 - 2w)(40 - 2w)$. For $w = 4$, remaining area = $52 \times 32 = 1664$, so path area = $2400 - 1664 = 736 \text{ m}^2$. Therefore the width is 4 m.

Q.37 A baker uses $\frac{3}{4}$ of a bag of flour for the first batch of cakes. What fraction of the original bag remains?

- A. $\frac{1}{5}$

- B. $1/4$
- C. $1/20$
- D. $1/2$

Answer

B. $1/4$

Explanation: If $3/4$ of the bag is used, the remaining fraction is $1 - 3/4 = 1/4$.

Q.38 A company made $7/9$ of its target profit in the first quarter and $5/8$ in the second quarter. What is the total profit as a fraction of one target?

- A. $101/72$
- B. $13/17$
- C. $11/17$
- D. $9/17$

Answer

A. $101/72$

Explanation: Total = $7/9 + 5/8 = 56/72 + 45/72 = 101/72$.

Q.39 A gardener buys three packets of seeds. The first has x seeds, the second has $2x + 3$, and the third has $4x - 1$. If the total is 65, how many seeds are in the first packet?

- A. 7
- B. 8
- C. 9
- D. 10

Answer

C. 9

Explanation: $x + 2x + 3 + 4x - 1 = 65$, so $7x + 2 = 65$. Thus $7x = 63$ and $x = 9$.

Q.40 A triangular park has sides 12 m, 16 m, and 20 m. Is it a right-angled triangle?

- A. Yes, using Pythagoras' theorem
- B. No, it is not right-angled
- C. Yes, it is equilateral
- D. Yes, it has a 30° angle

Answer

A. Yes, using Pythagoras' theorem

Explanation: $12^2 + 16^2 = 144 + 256 = 400 = 20^2$. Hence the triangle is right-angled.

Q.41 A machine makes 160 widgets in 8 hours. If its production rate increases by 20%, how many widgets will it make in 6 hours?

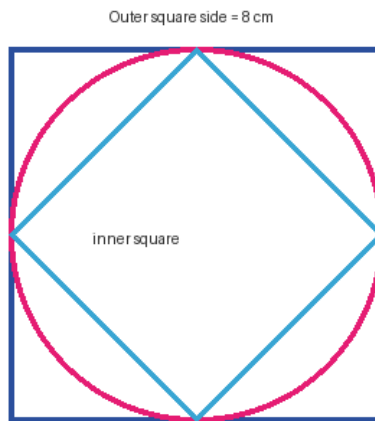
- A. 120
- B. 144
- C. 160
- D. 240

Answer

B. 144

Explanation: Original rate = $160/8 = 20$ widgets/hour. New rate = $20 \times 1.20 = 24$ widgets/hour. In 6 hours it produces $24 \times 6 = 144$ widgets.

Q.42 A circle is inscribed in a square, and a smaller square is inscribed in this circle. If the side of the outer square is 8 cm, what is the side length of the inner square?



- A. $4\sqrt{2}$ cm
- B. 8 cm
- C. 4 cm
- D. $2\sqrt{2}$ cm

Answer

A. $4\sqrt{2}$ cm

Explanation: The circle diameter equals the outer square side, 8 cm. The inner square diagonal equals this diameter. If $s\sqrt{2} = 8$, then $s = 8/\sqrt{2} = 4\sqrt{2}$ cm.

Q.43 A jar contains a water-milk mixture in the ratio 7:3. If 10 liters of mixture is removed and replaced with 10 liters of pure milk, the ratio becomes 5:5. What was the initial volume?

- A. 30 liters
- B. 35 liters
- C. 50 liters
- D. 70 liters

Answer

B. 35 liters

Explanation: Initial water = $0.7V$. Removing 10 liters removes 7 liters of water, so water left = $0.7V - 7$. Final ratio 5:5 means water is half the total V , so $0.7V - 7 = 0.5V$. Hence $0.2V = 7$ and $V = 35$ liters.

Q.44 A number n leaves remainder 3 when divided by 7 and remainder 5 when divided by 9. What is the smallest possible value of n ?

- A. 59
- B. 65
- C. 68
- D. 72

Answer

A. 59

Explanation: Numbers that are 3 more than a multiple of 7 are 3, 10, 17, ..., 59. Since 59 divided by 9 leaves remainder 5, the smallest value is 59.

Q.45 A bacterial population doubles every hour. Starting with one bacterium, how many bacteria will there be after 12 hours?

- A. 2^{11}
- B. $2^{12} - 1$
- C. 2^{12}
- D. $2^{11} + 1$

Answer

C. 2^{12}

Explanation: Each hour doubles the population. After 12 hours, population = $1 \times 2^{12} = 4096$.

Q.46 A bucket can be filled by taps A and B together in 8 minutes. Tap A alone takes 12 minutes. If both taps run for 4 minutes and then A is closed, how much more time will tap B take to fill the bucket?

- A. 4 minutes
- B. 6 minutes
- C. 8 minutes
- D. 12 minutes

Answer

D. 12 minutes

Explanation: Together they fill $\frac{1}{8}$ bucket per minute. In 4 minutes they fill $\frac{1}{2}$. Tap B's rate = $\frac{1}{8} - \frac{1}{12} = \frac{1}{24}$ bucket per minute. Remaining $\frac{1}{2}$ bucket takes $(\frac{1}{2}) / (\frac{1}{24}) = 12$ minutes.

Q.47 A triangle and a parallelogram have the same base and height. The triangle's area is 48 cm^2 . If the parallelogram's height is doubled, what is its new area?

- A. 48 cm^2
- B. 96 cm^2
- C. 144 cm^2
- D. 192 cm^2

Answer

D. 192 cm^2

Explanation: For the same base and height, parallelogram area is twice the triangle area, so it is 96 cm^2 . Doubling the height doubles the parallelogram area to 192 cm^2 .

Q.48 A bag contains 4 red, 5 blue, and 6 green balls. Two balls are drawn without replacement. What is the probability that both balls are of the same color?

- A. $13/105$
- B. $19/105$
- C. $31/105$
- D. $5/14$

Answer

C. $31/105$

Explanation: Favourable pairs = $C(4,2)+C(5,2)+C(6,2)=6+10+15=31$. Total pairs = $C(15,2)=105$. Probability = $31/105$.

Q.49 Simplify $2(x + y) + 3(x - y) - (x + 2y)$. If $x = 3$ and $y = -2$, what is the result?

- A. 9
- B. 12
- C. 15
- D. 18

Answer

D. 18

Explanation: Expression = $2x+2y+3x-3y-x-2y = 4x - 3y$. Substituting $x=3, y=-2$ gives $12 + 6 = 18$.

Q.50 A man invests ₹15,000 at 12% simple interest for 3 years. He then invests the interest earned in a 10% compound interest scheme for 2 years. What total amount does he have after 5 years, including the original ₹15,000?

- A. ₹18,600
- B. ₹21,534
- C. ₹22,260
- D. ₹24,000

Answer

B. ₹21,534

Explanation: Simple interest = $15000 \times 12 \times 3 / 100 = ₹5,400$. This grows at 10% compound interest for 2 years to $5400 \times 1.1^2 = ₹6,534$. Total with original principal = $15000 + 6534 = ₹21,534$.

Consolidated Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	B	2	C	3	A	4	C	5	A
6	B	7	B	8	B	9	A	10	B
11	B	12	A	13	B	14	B	15	A
16	B	17	D	18	A	19	B	20	B
21	A	22	A	23	A	24	A	25	A
26	B	27	A	28	D	29	A	30	A
31	B	32	C	33	A	34	B	35	B
36	A	37	B	38	A	39	C	40	A
41	B	42	A	43	B	44	A	45	C
46	D	47	D	48	C	49	D	50	B

