

NMMS Gujarat Mathematics

Sample Paper – 4

Duration: 20 Minutes

Maximum Marks: 20

Instructions

- This paper contains **20** Multiple Choice Questions (Single Correct Answer), modelled on the Mathematics portion of **NMMS Gujarat** (National Means-cum-Merit Scholarship).
- Each correct answer carries **+1 mark**. There is **no negative marking** for incorrect or unattempted answers.
- Only **one** option is correct per question.
- Syllabus level: **Class 7 & 8 Mathematics — NCERT / GSEB curriculum**.
- Use of mobile phones, calculators, or electronic gadgets is strictly prohibited.

Questions

Q1. Which property of rational numbers is illustrated by the equation below?

$$\frac{3}{5} \times \left(\frac{2}{7} + \frac{4}{9} \right) = \frac{3}{5} \times \frac{2}{7} + \frac{3}{5} \times \frac{4}{9}$$

- (A) Closure property of multiplication
- (B) Commutativity of multiplication
- (C) Associativity of multiplication
- (D) Distributive property of multiplication over addition

Q2. Using prime factorisation, what is $\sqrt{7056}$?

- (A) 84
- (B) 86
- (C) 78
- (D) 96

Q3. A cube has a volume of 3375 cm^3 . What is the length of each edge of the cube?



- (A) 12 cm
- (B) 15 cm
- (C) 18 cm
- (D) 20 cm

Q4. Simplify: $(-2)^3 \times (-2)^4 \div (-2)^5$

- (A) -4
- (B) -2
- (C) 4
- (D) 8

Q5. The sum of three consecutive even numbers is 78. Find the largest of the three numbers.

- (A) 24
- (B) 25
- (C) 26
- (D) 28

Q6. Find the value of $3x^2 - 2x + 5$ when $x = -1$.

- (A) 10
- (B) 6
- (C) 0
- (D) 4

Q7. Expand $(2a + 3b)^2$ using the identity $(a + b)^2 = a^2 + 2ab + b^2$.

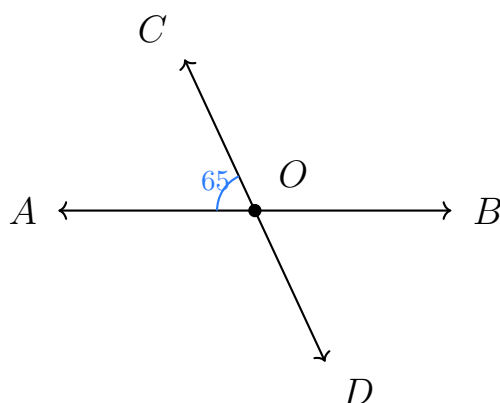
- (A) $4a^2 + 6ab + 9b^2$
- (B) $4a^2 + 12ab + 9b^2$
- (C) $4a^2 - 12ab + 9b^2$
- (D) $4a^2 + 9b^2$



Q8. Factorise by grouping: $ax + ay + bx + by$

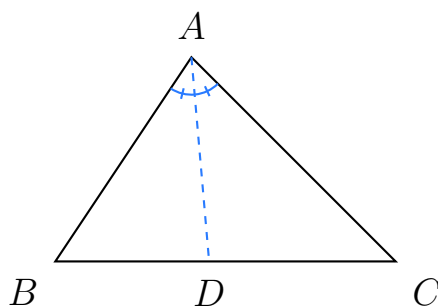
- (A) $(a + b)(x - y)$
- (B) $(a - b)(x + y)$
- (C) $(a + b)(x + y)$
- (D) $(a + x)(b + y)$

Q9. Two straight lines AB and CD intersect at point O as shown. If $\angle AOC = 65$, find the value of $\angle BOC$.



- (A) 65
- (B) 25
- (C) 90
- (D) 115

Q10. In $\triangle ABC$, $\angle BAC = 80$. AD is the bisector of $\angle BAC$, meeting BC at D as shown. Find $\angle BAD$.



- (A) 40

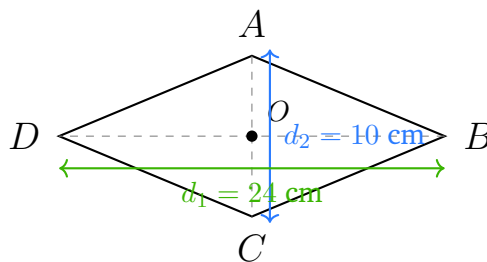


- (B) 80
- (C) 50
- (D) 30

Q11. In the congruence $\triangle PQR \cong \triangle XYZ$, it is given that $\angle P = 55$ and $\angle Q = 75$. What is the value of $\angle Z$?

- (A) 45
- (B) 50
- (C) 55
- (D) 75

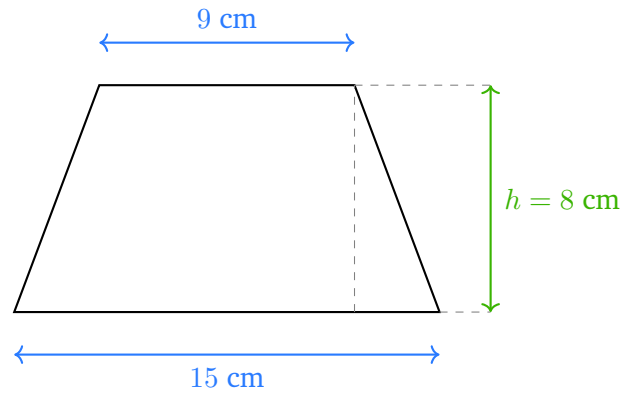
Q12. The rhombus $ABCD$ has diagonals intersecting at O . The diagonals have lengths $d_1 = 24$ cm and $d_2 = 10$ cm as shown in the figure. Find the area of the rhombus.



- (A) 60 cm^2
- (B) 100 cm^2
- (C) 120 cm^2
- (D) 240 cm^2

Q13. Find the area of the trapezium shown below, with parallel sides 15 cm and 9 cm and height $h = 8$ cm.





- (A) 80 cm^2
- (B) 88 cm^2
- (C) 192 cm^2
- (D) 96 cm^2

Q14. Find the perimeter of a semicircle with diameter 14 cm. $\left(\text{Use } \pi = \frac{22}{7}\right)$

- (A) 36 cm
- (B) 44 cm
- (C) 22 cm
- (D) 50 cm

Q15. Find the total surface area of a cuboid with dimensions $12 \text{ cm} \times 8 \text{ cm} \times 5 \text{ cm}$.

- (A) 480 cm^2
- (B) 392 cm^2
- (C) 360 cm^2
- (D) 576 cm^2

Q16. Two numbers are in the ratio 3 : 5. If their sum is 96, find the larger number.

- (A) 36



- (B) 48
- (C) 60
- (D) 72

Q17. A trader buys 10 articles for Rs. 400 and sells each article at Rs. 55. What is the profit or loss percentage?

- (A) 25% profit
- (B) 27.5% profit
- (C) 30% profit
- (D) 37.5% profit

Q18. Find the difference between the Compound Interest and Simple Interest on a principal of Rs. 8000 at 5% per annum for 2 years.

- (A) Rs. 20
- (B) Rs. 40
- (C) Rs. 80
- (D) Rs. 100

Q19. The mean of 5 numbers is 18. Four of the numbers are 12, 16, 20, and 24. Find the fifth number.

- (A) 16
- (B) 18
- (C) 20
- (D) 22

Q20. In a pie chart showing a student's daily time allocation, the sector representing "Study Time" has a central angle of 72. What percentage of the total time does the student spend on studying?

- (A) 15%



- (B) 18%
- (C) 20%
- (D) 25%



Detailed Solutions

Q1.

Solution

Concept — Properties of Rational Numbers: The four main properties are closure, commutativity, associativity, and distributivity. Each has a distinct algebraic structure.

Step 1 — Identify the structure of the given equation: The left side has one factor $\frac{3}{5}$ multiplied by a sum $\left(\frac{2}{7} + \frac{4}{9}\right)$ inside brackets.

Step 2 — Match to the correct property: The right side distributes $\frac{3}{5}$ over each addend:

$$\frac{3}{5} \times \left(\frac{2}{7} + \frac{4}{9}\right) = \frac{3}{5} \times \frac{2}{7} + \frac{3}{5} \times \frac{4}{9}$$

This matches the **Distributive Property**: $a \times (b + c) = a \times b + a \times c$.

Why other options are wrong:

- Option A: Closure states the result stays rational; it does not describe distributing a factor over a sum.
- Option B: Commutativity swaps operands ($a \times b = b \times a$); that is not the structure here.
- Option C: Associativity re-brackets three factors ($a \times (b \times c) = (a \times b) \times c$); irrelevant here.

Final Answer: The property illustrated is the Distributive Property. $\Rightarrow$ D

Answer: (D) [Go Back to Q1](#)

Q2.

Solution

Concept — Square Root by Prime Factorisation: Express the number as a product of prime factors, pair them, and take one factor from each pair.

Step 1 — Prime factorise 7056:

$$\begin{aligned} 7056 &= 2^2 \times 1764 = 2^4 \times 441 \\ 441 &= 3^2 \times 49 = 3^2 \times 7^2 \\ \therefore 7056 &= 2^4 \times 3^2 \times 7^2 \end{aligned}$$



Step 2 — Take the square root:

$$\sqrt{7056} = 2^2 \times 3 \times 7 = 4 \times 21 = 84$$

Verify: $84 \times 84 = 7056$ ✓

Why other options are wrong:

- Option B: $86^2 = 7396 \neq 7056$.
- Option C: $78^2 = 6084 \neq 7056$.
- Option D: $96^2 = 9216 \neq 7056$.

Final Answer: $\sqrt{7056} = 84 \Rightarrow$ A

Answer: (A) [Go Back to Q2](#)

Q3.

Solution

Concept — Cube Root from the Volume of a Cube: If each edge has length a , then Volume = a^3 , so $a = \sqrt[3]{\text{Volume}}$.

Step 1 — Prime factorise 3375:

$$3375 = 3^3 \times 5^3 = (3 \times 5)^3 = 15^3$$

Step 2 — Find the edge length:

$$a = \sqrt[3]{3375} = 15 \text{ cm}$$

Verify: $15 \times 15 \times 15 = 225 \times 15 = 3375 \text{ cm}^3$ ✓

Why other options are wrong:

- Option A: $12^3 = 1728 \neq 3375$.
- Option C: $18^3 = 5832 \neq 3375$.
- Option D: $20^3 = 8000 \neq 3375$.

Final Answer: Edge = 15 cm $\Rightarrow$ B

Answer: (B) [Go Back to Q3](#)



Q4.

Solution

Concept — Laws of Exponents (Same Base): $a^m \times a^n = a^{m+n}$ and $a^m \div a^n = a^{m-n}$.

Step 1 — Multiply:

$$(-2)^3 \times (-2)^4 = (-2)^{3+4} = (-2)^7$$

Step 2 — Divide:

$$(-2)^7 \div (-2)^5 = (-2)^{7-5} = (-2)^2 = 4$$

Note: any number squared is non-negative, so $(-2)^2 = +4$.

Why other options are wrong:

- Option A: -4 comes from incorrectly thinking $(-2)^2 = -4$; a square is always non-negative.
- Option B: $-2 = (-2)^1$ corresponds to exponent $7 - 5 - 1 = 1$, which is not the correct rule.
- Option D: $8 = (-2)^3$ would require a final exponent of 3, not 2.

Final Answer: $(-2)^3 \times (-2)^4 \div (-2)^5 = 4 \Rightarrow \boxed{\text{C}}$

Answer: (C) [Go Back to Q4](#)

Q5.

Solution

Concept — Consecutive Even Numbers and Linear Equations: Consecutive even numbers differ by 2. Let them be $n, n + 2, n + 4$.

Step 1 — Form and solve the equation:

$$n + (n + 2) + (n + 4) = 78 \implies 3n + 6 = 78 \implies 3n = 72 \implies n = 24$$

Step 2 — Identify the three numbers and the largest: The three consecutive even numbers are 24, 26, 28. The **largest** is 28.

Why other options are wrong:

- Option A: 24 is the *smallest* of the three numbers.



- Option B: 25 is an odd number and cannot be part of an even sequence.
- Option C: 26 is the *middle* number, not the largest.

Final Answer: Largest number = 28 $\Rightarrow$ D

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

Q6.

Solution

Concept — Evaluating an Algebraic Expression: Substitute the given value of x and simplify each term carefully, paying attention to signs.

Step 1 — Substitute $x = -1$:

$$3(-1)^2 - 2(-1) + 5$$

Step 2 — Simplify term by term:

$$= 3(1) - 2(-1) + 5 = 3 + 2 + 5 = 10$$

Key points: $(-1)^2 = +1$ and $-2 \times (-1) = +2$.

Why other options are wrong:

- Option B: 6 arises from substituting $x = +1$ instead of $x = -1$: $3(1) - 2(1) + 5 = 6$.
- Option C: 0 has no valid derivation from this expression at $x = -1$.
- Option D: 4 arises from incorrectly computing $(-1)^2 = -1$: $3(-1) - 2(-1) + 5 = -3 + 2 + 5 = 4$.

Final Answer: $3x^2 - 2x + 5|_{x=-1} = 10 \Rightarrow$ A

Answer: (A) [Go Back to Q6](#)



Q7.

Solution

Concept — Algebraic Identity $(a + b)^2 = a^2 + 2ab + b^2$: Here substitute $a \rightarrow 2a$ and $b \rightarrow 3b$.

Step 1 — Apply the identity:

$$(2a + 3b)^2 = (2a)^2 + 2 \cdot (2a) \cdot (3b) + (3b)^2$$

Step 2 — Compute each term:

$$= 4a^2 + 12ab + 9b^2$$

The middle coefficient: $2 \times 2 \times 3 = 12$.

Why other options are wrong:

- Option A: $4a^2 + 6ab + 9b^2$ has $6ab$ instead of $12ab$; the factor of 2 from the identity $2ab$ was omitted.
- Option C: $4a^2 - 12ab + 9b^2$ is the expansion of $(2a - 3b)^2$, not $(2a + 3b)^2$.
- Option D: $4a^2 + 9b^2$ omits the cross-product term $12ab$ entirely.

Final Answer: $(2a + 3b)^2 = 4a^2 + 12ab + 9b^2 \Rightarrow \boxed{\text{B}}$

Answer: (B) [Go Back to Q7](#)

Q8.

Solution

Concept — Factorisation by Grouping: Group terms so that a common factor appears in each group, then factor again.

Step 1 — Group and factor each group:

$$ax + ay + bx + by = (ax + ay) + (bx + by) = a(x + y) + b(x + y)$$

Step 2 — Factor out the common binomial $(x + y)$:

$$= (a + b)(x + y)$$

Why other options are wrong:



- Option A: $(a + b)(x - y) = ax - ay + bx - by \neq ax + ay + bx + by$.
- Option B: $(a - b)(x + y) = ax + ay - bx - by \neq ax + ay + bx + by$.
- Option D: $(a + x)(b + y) = ab + ay + bx + xy \neq ax + ay + bx + by$.

Final Answer: $ax + ay + bx + by = (a + b)(x + y) \Rightarrow \boxed{\text{C}}$

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

Q9.

Solution

Concept — Linear Pair (Supplementary Angles) and Vertically Opposite Angles: When two lines intersect: (i) adjacent angles form a linear pair summing to 180; (ii) vertically opposite angles are equal.

Step 1 — Apply the linear pair property: Points A, O, B are collinear (straight line AB). Therefore $\angle AOC$ and $\angle BOC$ form a linear pair:

$$\angle AOC + \angle BOC = 180 \implies \angle BOC = 180 - 65 = 115$$

Step 2 — Verify using all four angles: $\angle BOD = \angle AOC = 65$ (vertically opposite) and $\angle AOD = \angle BOC = 115$ (vertically opposite). Sum check: $65 + 115 + 65 + 115 = 360 \checkmark$

Why other options are wrong:

- Option A: 65 equals $\angle AOC$ itself (or its vertically opposite $\angle BOD$), not $\angle BOC$.
- Option B: $25 = 90 - 65$; no such angle is formed when two straight lines simply intersect.
- Option C: 90 would only result if $AB \perp CD$; the given lines are not perpendicular.

Final Answer: $\angle BOC = 115 \Rightarrow \boxed{\text{D}}$

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



Q10.

Solution

Concept — Angle Bisector Property: An angle bisector divides an angle into two equal halves.

Step 1 — Apply the definition: AD bisects $\angle BAC = 80$, so:

$$\angle BAD = \angle DAC = \frac{\angle BAC}{2} = \frac{80}{2} = 40$$

Why other options are wrong:

- Option B: 80 is the full $\angle BAC$, not the half angle created by the bisector.
- Option C: 50 has no basis from the given data ($80 \div 2 = 40$, not 50).
- Option D: 30 has no basis from the given data.

Final Answer: $\angle BAD = 40 \Rightarrow$ A

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

Q11.

Solution

Concept — Corresponding Parts of Congruent Triangles (CPCT): If $\triangle PQR \cong \triangle XYZ$, then corresponding angles are equal: $\angle P = \angle X$, $\angle Q = \angle Y$, $\angle R = \angle Z$.

Step 1 — Find $\angle R$ using the angle sum property of a triangle:

$$\angle P + \angle Q + \angle R = 180 \implies 55 + 75 + \angle R = 180 \implies \angle R = 50$$

Step 2 — Apply CPCT:

$$\angle Z = \angle R = 50$$

Why other options are wrong:

- Option A: 45 cannot be derived from the given angles.
- Option C: $55 = \angle P = \angle X$; this corresponds to vertex P , not vertex R .
- Option D: $75 = \angle Q = \angle Y$; this corresponds to vertex Q , not vertex R .

Final Answer: $\angle Z = 50 \Rightarrow$ B

Answer: (B) [Go Back to Q11](#)



Q12.

Solution**Concept — Area of a Rhombus Using Diagonals:**

$$\text{Area of rhombus} = \frac{d_1 \times d_2}{2}$$

where d_1 and d_2 are the lengths of the two diagonals.

Step 1 — Substitute the given values:

$$d_1 = 24 \text{ cm}, \quad d_2 = 10 \text{ cm}$$

Step 2 — Calculate the area:

$$\text{Area} = \frac{24 \times 10}{2} = \frac{240}{2} = 120 \text{ cm}^2$$

Why other options are wrong:

- Option A: $60 \text{ cm}^2 = \frac{240}{4}$; divides by 4 instead of 2 (perhaps computing only one quarter of the rhombus).
- Option B: 100 cm^2 has no valid derivation from these diagonal lengths.
- Option D: $240 \text{ cm}^2 = 24 \times 10$; forgets to divide by 2.

Final Answer: Area = $120 \text{ cm}^2 \Rightarrow \boxed{\text{C}}$ **Answer: (C)** [Go Back to Q12](#)

Q13.

Solution**Concept — Area of a Trapezium:**

$$\text{Area} = \frac{1}{2} \times (\text{sum of parallel sides}) \times \text{height}$$

Step 1 — Identify the values: Parallel sides: 15 cm and 9 cm; height $h = 8$ cm.**Step 2 — Calculate:**

$$\text{Area} = \frac{1}{2} \times (15 + 9) \times 8 = \frac{1}{2} \times 24 \times 8 = \frac{192}{2} = 96 \text{ cm}^2$$

Why other options are wrong:

- Option A: 80 cm^2 results from an arithmetic error in the sum of parallel sides.
- Option B: $88 \text{ cm}^2 = \frac{1}{2} \times (15 + 7) \times 8$; uses an incorrect value for one of the parallel sides.
- Option C: $192 \text{ cm}^2 = 24 \times 8$; forgets the $\frac{1}{2}$ factor in the formula.

Final Answer: Area = $96 \text{ cm}^2 \Rightarrow$ D

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

Q14.

Solution

Concept — Perimeter of a Semicircle: A semicircle has a curved arc (half circumference) and a straight diameter.

$$\text{Perimeter} = \pi r + 2r = r(\pi + 2)$$

Step 1 — Find the radius: Diameter = 14 cm, so $r = 7$ cm.

Step 2 — Calculate:

$$\text{Curved arc} = \pi r = \frac{22}{7} \times 7 = 22 \text{ cm}$$

$$\text{Perimeter} = \text{curved arc} + \text{diameter} = 22 + 14 = 36 \text{ cm}$$

Why other options are wrong:

- Option B: $44 \text{ cm} = 2\pi r$ is the full circumference of a circle with $r = 7$ cm; the arc is only half that.
- Option C: 22 cm is the curved arc alone; the diameter (14 cm) is not included.
- Option D: 50 cm has no valid derivation.

Final Answer: Perimeter = 36 cm $\Rightarrow$ A

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



Q15.

Solution**Concept — Total Surface Area (TSA) of a Cuboid:**

$$\text{TSA} = 2(lb + bh + lh)$$

where l , b , h are length, breadth, and height.

Step 1 — Identify dimensions and compute each face area: $l = 12$ cm, $b = 8$ cm, $h = 5$ cm.

$$lb = 12 \times 8 = 96 \text{ cm}^2, \quad bh = 8 \times 5 = 40 \text{ cm}^2, \quad lh = 12 \times 5 = 60 \text{ cm}^2$$

Step 2 — Apply the formula:

$$\text{TSA} = 2(96 + 40 + 60) = 2 \times 196 = 392 \text{ cm}^2$$

Why other options are wrong:

- Option A: 480 cm^2 results from an arithmetic error in adding the three face areas.
- Option C: 360 cm^2 results from omitting one pair of faces (e.g., using only $lb + bh$).
- Option D: $576 \text{ cm}^2 = 6 \times 96 = 6 \times (12)^2$ applies the cube formula for side 12, ignoring the other dimensions.

Final Answer: $\text{TSA} = 392 \text{ cm}^2 \Rightarrow \boxed{\text{B}}$

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

Q16.

Solution

Concept — Ratio and Proportion: If two numbers are in ratio $3 : 5$, represent them as $3x$ and $5x$.

Step 1 — Use the given sum to find x :

$$3x + 5x = 96 \implies 8x = 96 \implies x = 12$$



Step 2 — Find the larger number:

$$\text{Larger number} = 5x = 5 \times 12 = 60$$

Check: $3 \times 12 = 36$; $36 + 60 = 96 \checkmark$; ratio $= 36 : 60 = 3 : 5 \checkmark$

Why other options are wrong:

- Option A: $36 = 3x$ is the *smaller* number.
- Option B: $48 = 4 \times 12$; there is no ratio part corresponding to $4x$ in a $3 : 5$ ratio.
- Option D: 72 would require $5x = 72 \Rightarrow x = 14.4$, giving sum $= 8 \times 14.4 = 115.2 \neq 96$.

Final Answer: Larger number $= 60 \Rightarrow \boxed{\text{C}}$

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

Q17.

Solution**Concept — Profit Percentage:**

$$\text{Profit\%} = \frac{\text{SP} - \text{CP}}{\text{CP}} \times 100$$

Step 1 — Find the total CP and SP for 10 articles:

$$\text{CP} = \text{Rs. } 400 \quad \text{SP} = 10 \times \text{Rs. } 55 = \text{Rs. } 550$$

Step 2 — Calculate profit and profit%:

$$\text{Profit} = 550 - 400 = \text{Rs. } 150$$

$$\text{Profit\%} = \frac{150}{400} \times 100 = \frac{15000}{400} = 37.5\%$$

Why other options are wrong:

- Option A: 25% profit implies $\text{SP} = 400 \times 1.25 = \text{Rs. } 500 \neq \text{Rs. } 550$.
- Option B: 27.5% profit implies $\text{SP} = 400 \times 1.275 = \text{Rs. } 510 \neq \text{Rs. } 550$.
- Option C: 30% profit implies $\text{SP} = 400 \times 1.30 = \text{Rs. } 520 \neq \text{Rs. } 550$.

Final Answer: Profit $= 37.5\% \Rightarrow \boxed{\text{D}}$



Answer: (D) [Go Back to Q17](#)

Q18.

Solution**Concept — Difference Between CI and SI for 2 Years:**

$$CI - SI = P \left(\frac{R}{100} \right)^2$$

Step 1 — Calculate Simple Interest:

$$SI = \frac{P \times R \times T}{100} = \frac{8000 \times 5 \times 2}{100} = \text{Rs. } 800$$

Step 2 — Calculate Compound Interest:

$$A = P \left(1 + \frac{R}{100} \right)^2 = 8000 \times \left(\frac{21}{20} \right)^2 = 8000 \times \frac{441}{400} = \text{Rs. } 8820$$

$$CI = 8820 - 8000 = \text{Rs. } 820$$

Step 3 — Find the difference:

$$CI - SI = 820 - 800 = \text{Rs. } 20$$

Shortcut verify: $P(R/100)^2 = 8000 \times (0.05)^2 = 8000 \times 0.0025 = \text{Rs. } 20 \checkmark$ **Why other options are wrong:**

- Option B: Rs. 40 corresponds to $P = 8000$, $R = 10\%$, $T = 2$ years: $8000 \times (0.1)^2 = 80 \neq 40$; no valid scenario.
- Options C and D: Far too large for $P = 8000$, $R = 5\%$, $T = 2$ years.

Final Answer: $CI - SI = \text{Rs. } 20 \Rightarrow \boxed{A}$ **Answer: (A)** [Go Back to Q18](#)

Q19.

Solution

Concept — Finding a Missing Value Using the Mean: $\text{Mean} = \frac{\text{Sum of all values}}{\text{Number of values}}$, so $\text{Sum} = \text{Mean} \times \text{Number of values}$.

Step 1 — Find the total sum:

$$\text{Total sum} = 18 \times 5 = 90$$

Step 2 — Subtract the four known values:

$$12 + 16 + 20 + 24 = 72$$

$$\text{Fifth number} = 90 - 72 = 18$$

Why other options are wrong:

- Option A: If fifth = 16: sum = 88, mean = $88/5 = 17.6 \neq 18$.
- Option C: If fifth = 20: sum = 92, mean = $92/5 = 18.4 \neq 18$.
- Option D: If fifth = 22: sum = 94, mean = $94/5 = 18.8 \neq 18$.

Final Answer: Fifth number = 18 $\Rightarrow$ **B**

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

Q20.

Solution

Concept — Converting a Central Angle to Percentage in a Pie Chart: A full circle (360) represents 100% of the data.

$$\text{Percentage} = \frac{\text{Central angle}}{360} \times 100$$

Step 1 — Substitute the given angle:

$$\text{Percentage} = \frac{72}{360} \times 100$$

Step 2 — Simplify:

$$= \frac{72}{360} \times 100 = \frac{1}{5} \times 100 = 20\%$$



Why other options are wrong:

- Option A: 15% corresponds to a central angle of $\frac{15}{100} \times 360 = 54$, not 72.
- Option B: 18% corresponds to a central angle of $\frac{18}{100} \times 360 = 64.8$, not 72.
- Option D: 25% corresponds to a central angle of $\frac{25}{100} \times 360 = 90$, not 72.

Final Answer: Study time = 20% $\Rightarrow$ C

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



Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	D	2	A	3	B	4	C	5	D
6	A	7	B	8	C	9	D	10	A
11	B	12	C	13	D	14	A	15	B
16	C	17	D	18	A	19	B	20	C

