

CTET Mathematics Practice Test

Paper I (For Classes I–V)

General Instructions

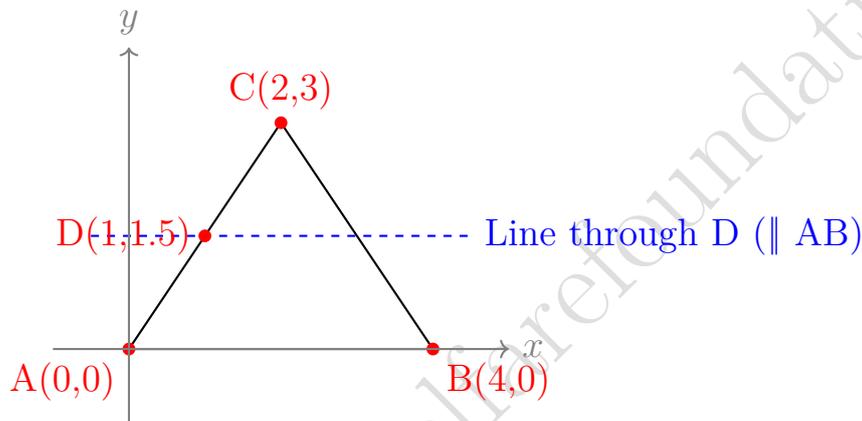
Practice Test - 02

1. This paper contains a total of **30** questions.
2. All questions are **compulsory**.
3. Each question carries **1** mark.
4. There is **no negative marking**.
5. The maximum marks for this test are **30**.
6. The total duration of the test is **45 minutes**.
7. Choose the most appropriate answer from the given options.
8. Use of calculators, mobile phones, or any electronic devices is **not permitted**.
9. Rough work may be done on the space provided at the end of the paper.
10. Read each question carefully before answering.

All the Best!

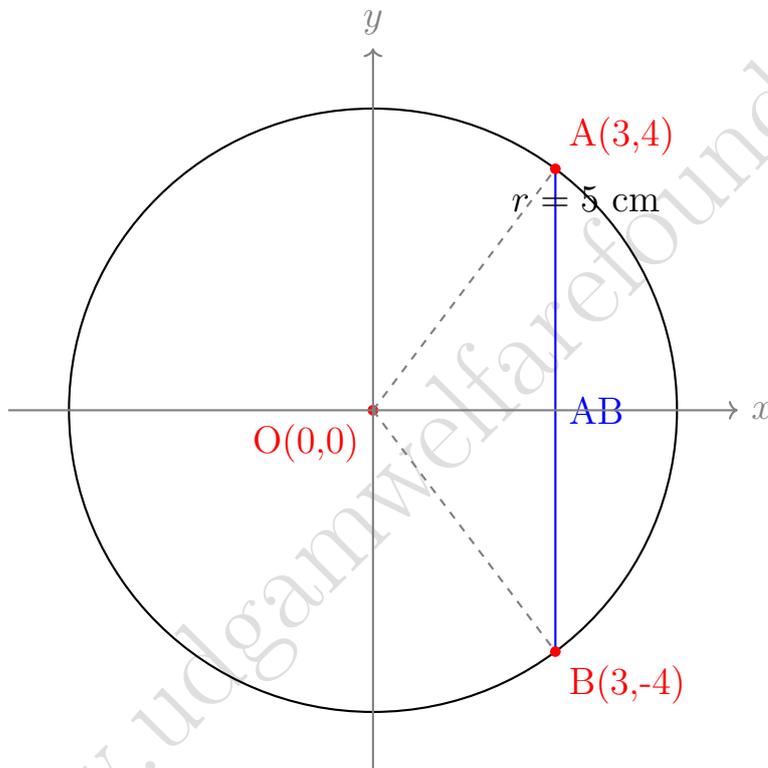
1. A rectangular garden has length 12 m and breadth 8 m. What is the ratio of its perimeter to its area?
 - (a) 5:12
 - (b) 5:6
 - (c) 5:24

- (d) 10:24
2. Which of the following teaching strategies is most effective for introducing the concept of fractions to Class III students?
- (a) Memorizing fraction definitions
 - (b) Using paper folding and cutting activities
 - (c) Solving fraction problems from textbook
 - (d) Writing fractions repeatedly
3. In the triangle with vertices $A(0,0)$, $B(4,0)$, and $C(2,3)$, a line parallel to base AB passes through point $D(1,1.5)$. What is the length ratio of the smaller triangle to the original triangle?



- (a) 1:2
 - (b) 1:4
 - (c) 1:8
 - (d) 1:16
4. If $\frac{3}{5}$ of a number is 45, what is $\frac{2}{3}$ of the same number?
- (a) 30
 - (b) 40
 - (c) 50
 - (d) 60
5. A teacher wants to assess students' understanding of 3D shapes. Which activity would be most appropriate?
- (a) Naming shapes from pictures
 - (b) Memorizing properties of shapes

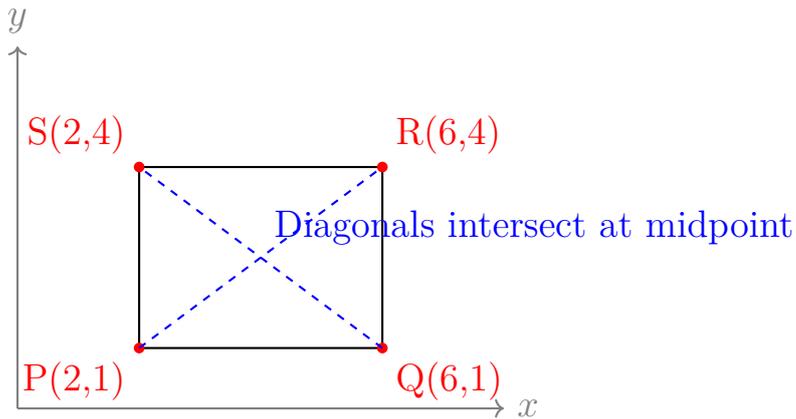
- (c) Creating models using clay or nets
(d) Solving volume calculation problems
6. The sum of three consecutive even numbers is 78. What is the middle number?
- (a) 24
(b) 26
(c) 28
(d) 30
7. In a circle with center $O(0,0)$ and radius 5 cm, a chord AB has endpoints $A(3,4)$ and $B(3,-4)$. What is the length of chord AB ?



- (a) 6 cm
(b) 8 cm
(c) 10 cm
(d) 12 cm
8. A student consistently makes errors in carrying over during addition. What approach should the teacher take?
- (a) Give more practice problems
(b) Explain the concept using base-ten blocks

- (c) Ask student to memorize the procedure
(d) Provide worked examples to copy
9. The area of a square is 144 cm^2 . If its side is doubled, what will be the new perimeter?
- (a) 48 cm
(b) 72 cm
(c) 96 cm
(d) 144 cm
10. Which pattern follows the rule "Multiply by 2 and add 3": 5, 13, 29, ?
- (a) 45
(b) 55
(c) 61
(d) 65
11. A cuboid has dimensions $6 \text{ cm} \times 4 \text{ cm} \times 3 \text{ cm}$. How many cubes of side 1 cm can be packed in it?
- (a) 48
(b) 60
(c) 72
(d) 84
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12. For teaching measurement concepts to Class II students, which method is most developmentally appropriate?
- (a) Using standard units only
(b) Starting with non-standard units like hand spans
(c) Memorizing conversion formulas
(d) Solving word problems
13. The product of two numbers is 216. If their HCF is 6, what is their LCM?
- (a) 24
(b) 30

- (c) 36
(d) 42
14. In a pictograph, each symbol represents 5 books. If a student reads 18 books, how many complete symbols should be drawn?
- (a) 3
(b) 3.5
(c) 4
(d) 3.6
15. A triangle has sides measuring 7 cm, 24 cm, and 25 cm. What type of triangle is it?
- (a) Acute angled
(b) Obtuse angled
(c) Right angled
(d) Equilateral
16. When introducing division, a teacher uses the concept of equal sharing. This approach aligns with:
- (a) Rote learning method
(b) Concrete to abstract progression
(c) Traditional teaching method
(d) Competitive learning
17. A train covers 120 km in 2 hours. How long will it take to cover 300 km at the same speed?
- (a) 4 hours
(b) 5 hours
(c) 6 hours
(d) 7 hours
18. The coordinates of a rectangle are P(2,1), Q(6,1), R(6,4), S(2,4). What is its area?



- (a) 12 square units
 (b) 16 square units
 (c) 20 square units
 (d) 24 square units
19. A student says that $\frac{2}{3}$ is smaller than $\frac{1}{2}$ because 2 is smaller than 3. How should the teacher address this misconception?
- (a) Correct the student immediately
 (b) Use visual fraction strips to compare
 (c) Give more examples to memorize
 (d) Ask another student to explain
20. What is the smallest number that when divided by 12, 15, and 18 leaves remainder 5 in each case?
- (a) 175
 (b) 180
 (c) 185
 (d) 190

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21. In a bar graph showing favorite fruits of students, the bar for apples is 8 cm tall. If the scale is 1 cm = 5 students, how many students prefer apples?
- (a) 35
 (b) 38

- (c) 40
(d) 45
22. Which teaching resource is most effective for demonstrating symmetry to Class IV students?
- (a) Textbook diagrams
(b) Paper cutting and folding
(c) Written exercises
(d) Verbal explanations
23. A shopkeeper bought 20 pens for Rs.400 and sold them at Rs.25 each. What is his profit percentage?
- (a) 20%
(b) 25%
(c) 30%
(d) 35%
24. The perimeter of a regular hexagon is 42 cm. What is the length of each side?
- (a) 6 cm
(b) 7 cm
(c) 8 cm
(d) 9 cm
25. For assessing pattern recognition skills, which activity would be most suitable for Class I students?
- (a) Completing number patterns
(b) Identifying patterns in bead strings
(c) Solving algebraic patterns
(d) Writing pattern rules
26. If 15% of a number is 45, what is 30% of the same number?
- (a) 60
(b) 75
(c) 90
(d) 120

27. A cylindrical container has radius 7 cm and height 10 cm. What is its volume? (Use $\pi = \frac{22}{7}$)
- (a) 1540 cm³
 - (b) 1640 cm³
 - (c) 1740 cm³
 - (d) 1840 cm³
28. When teaching time, a teacher uses analog clocks with movable hands. This approach helps in:
- (a) Memorizing time facts
 - (b) Developing spatial understanding
 - (c) Solving word problems
 - (d) Writing digital time
29. Simplify: $12.5 + 8.75 - 6.25$
- (a) 14.75
 - (b) 15.00
 - (c) 15.25
 - (d) 15.50
30. In a class of 40 students, the ratio of boys to girls is 3:2. How many girls should join to make the ratio 1:1?
- (a) 5
 - (b) 8
 - (c) 10
 - (d) 12

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