

CTET Mathematics Practice Test

Paper I (For Classes I–V)

General Instructions

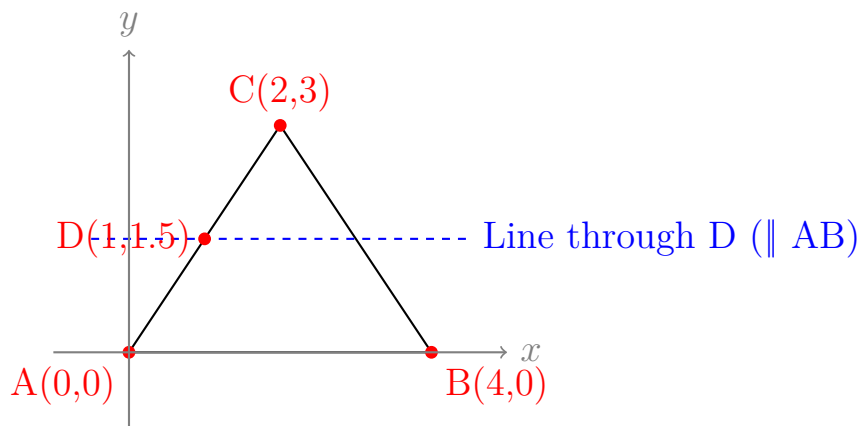
Practice Test - 02

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!

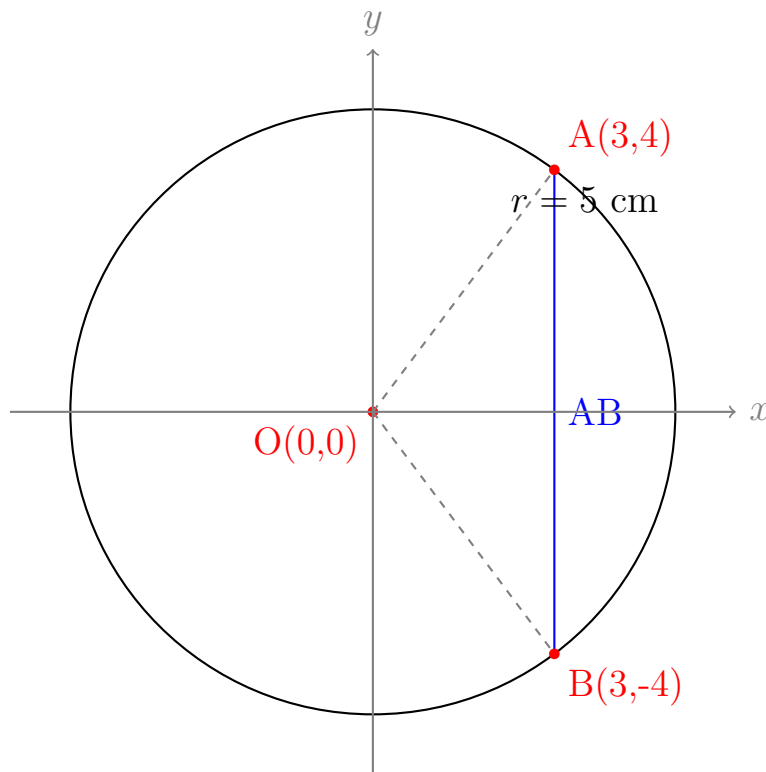
1. A rectangular garden has length 12 m and breadth 8 m. What is the ratio of its perimeter to its area?
 - (a) 5:12
 - (b) 5:6
 - (c) 5:24
 - (d) 10:24

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

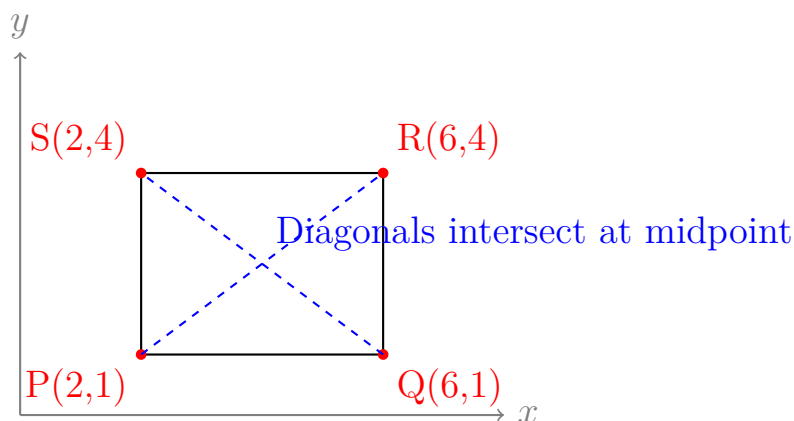
- (d) Solving volume calculation problems
6. The sum of three consecutive even numbers is 78. What is the middle number?
- (a) 24
(b) 26
(c) 28
(d) 30
7. In a circle with center $O(0,0)$ and radius 5 cm, a chord AB has endpoints $A(3,4)$ and $B(3,-4)$. What is the length of chord AB ?



- (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
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
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
- (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 cm^3
 - (b) 1640 cm^3
 - (c) 1740 cm^3
 - (d) 1840 cm^3
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