

CTET Mathematics Practice Test

Paper I (For Classes I–V)

General Instructions

Practice Test - 30

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 teacher wants to introduce the concept of "fractions" to Class III students. Which activity is most effective?
 - (a) Using fraction strips to compare and add fractions
 - (b) Asking students to solve fraction problems on paper
 - (c) Giving a lecture on the history of fractions
 - (d) Asking students to memorize fraction tables

2. The coordinates of a triangle are $A(0,0)$, $B(9,0)$, and $C(4.5,9)$. A line parallel to BC intersects AB at $(3, y)$ and AC at $(x, 3)$. The value of x is:
- (a) 1.5
 - (b) 2
 - (c) 2.5
 - (d) 3
3. Which method is best to teach "place value" to Class II students?
- (a) Using an abacus to show tens and ones
 - (b) Asking students to write numbers in expanded form
 - (c) Giving a lecture on the history of the decimal system
 - (d) Asking students to memorize place value charts
4. The coordinates of a rectangle are $A(0,0)$, $B(8,0)$, $C(8,3)$, and $D(0,3)$. The length of the diagonal AC is:
- (a) 8 units
 - (b) 9 units
 - (c) 10 units
 - (d) 11 units
5. To assess understanding of "fractions," which activity is most appropriate?
- (a) Asking students to solve fraction problems on paper
 - (b) Using fraction circles to compare and add fractions
 - (c) Giving a lecture on the importance of fractions
 - (d) Asking students to memorize fraction tables
6. The smallest 4-digit number formed using the digits 1, 0, 5, 9 (each digit used only once) is:
- (a) 0159
 - (b) 1059
 - (c) 1509
 - (d) 1590
7. To teach "symmetry" to Class III students, which activity is most suitable?

- (a) Asking students to draw symmetrical shapes
 - (b) Using paper folding to demonstrate lines of symmetry
 - (c) Giving a lecture on the types of symmetry
 - (d) Asking students to memorize symmetrical shapes
8. The equation of a circle with center (4,7) and radius 5 is:
- (a) $(x - 4)^2 + (y - 7)^2 = 25$
 - (b) $(x + 4)^2 + (y + 7)^2 = 25$
 - (c) $(x - 4)^2 + (y - 7)^2 = 5$
 - (d) $(x + 4)^2 + (y + 7)^2 = 5$
9. To teach "measurement of length" to Class I students, which activity is most suitable?
- (a) Using a ruler to measure objects
 - (b) Using non-standard units like hand spans and footsteps
 - (c) Giving a lecture on the history of measurement
 - (d) Asking students to memorize standard units of length
10. The coordinates of a triangle are A(0,0), B(7,0), and C(0,7). A line parallel to BC intersects AB at (1, y) and AC at (x, 1). The value of y is:
- (a) 0.2
 - (b) 0.4
 - (c) 0.6
 - (d) 0.8
11. To introduce "data handling" to Class II students, which activity is most suitable?
- (a) Asking students to create a bar graph using given data
 - (b) Using real-life examples to collect and organize data in a tally chart
 - (c) Giving a lecture on the importance of data handling
 - (d) Asking students to memorize types of graphs
12. The length of the diagonal BD of a square with vertices A(0,0), B(7,0), C(7,7), and D(0,7) is:

- (a) $7\sqrt{2}$ units
 - (b) 9 units
 - (c) 12 units
 - (d) 14 units
13. To teach "addition with regrouping" to Class II students, which activity is most suitable?
- (a) Using base-10 blocks to demonstrate regrouping
 - (b) Asking students to solve addition problems on paper
 - (c) Giving a lecture on the history of addition
 - (d) Asking students to memorize addition facts
14. The perimeter of a rectangle with vertices A(0,0), B(6,0), C(6,4), and D(0,4) is:
- (a) 14 units
 - (b) 16 units
 - (c) 18 units
 - (d) 20 units
15. To assess understanding of "3D shapes," which activity is most appropriate?
- (a) Asking students to draw 3D shapes
 - (b) Providing real-life objects like cubes, spheres, and cylinders for identification
 - (c) Giving a lecture on the properties of 3D shapes
 - (d) Asking students to memorize the names of 3D shapes
16. The area of a triangle with vertices A(0,0), B(8,0), and C(4,8) is:
- (a) 16 square units
 - (b) 24 square units
 - (c) 32 square units
 - (d) 36 square units
17. To teach "time" to Class II students, which activity is most suitable?
- (a) Using a digital clock to show time

- (b) Using an analog clock with movable hands to teach hours and minutes
 - (c) Giving a lecture on the history of clocks
 - (d) Asking students to memorize the time table
18. The equation of a circle with center (0,0) and radius 8 is:
- (a) $x^2 + y^2 = 64$
 - (b) $x^2 + y^2 = 16$
 - (c) $x^2 + y^2 = 8$
 - (d) $x^2 + y^2 = 4$
19. To teach "subtraction with borrowing" to Class III students, which activity is most suitable?
- (a) Using base-10 blocks to demonstrate borrowing
 - (b) Asking students to solve subtraction problems on paper
 - (c) Giving a lecture on the history of subtraction
 - (d) Asking students to memorize subtraction facts
20. The area of a rectangle with vertices A(1,1), B(7,1), C(7,4), and D(1,4) is:
- (a) 16 square units
 - (b) 18 square units
 - (c) 20 square units
 - (d) 24 square units
21. To introduce "patterns" to Class I students, which activity is most suitable?
- (a) Asking students to solve pattern problems on paper
 - (b) Using colored beads to create and extend patterns
 - (c) Giving a lecture on the importance of patterns
 - (d) Asking students to memorize pattern sequences
22. The perimeter of a triangle with vertices A(0,0), B(9,0), and C(4.5,9) is:
- (a) 18 units
 - (b) 22.5 units

- (c) 27 units
 - (d) 30 units
23. To teach "money" to Class II students, which activity is most suitable?
- (a) Using real coins and notes to simulate a shopping experience
 - (b) Asking students to solve money problems on paper
 - (c) Giving a lecture on the history of money
 - (d) Asking students to memorize the value of coins and notes
24. The area of a square with vertices A(1,1), B(6,1), C(6,6), and D(1,6) is:
- (a) 16 square units
 - (b) 20 square units
 - (c) 25 square units
 - (d) 30 square units
25. To assess understanding of "perimeter," which activity is most appropriate?
- (a) Asking students to measure the perimeter of objects using a ruler
 - (b) Using grid paper to calculate the perimeter of shapes
 - (c) Giving a lecture on the importance of perimeter
 - (d) Asking students to memorize the formula for perimeter
26. The equation of a circle with center (5,6) and radius 4 is:
- (a) $(x - 5)^2 + (y - 6)^2 = 16$
 - (b) $(x + 5)^2 + (y + 6)^2 = 16$
 - (c) $(x - 5)^2 + (y - 6)^2 = 4$
 - (d) $(x + 5)^2 + (y + 6)^2 = 4$
27. To teach "multiplication as repeated addition" to Class III students, which activity is most suitable?
- (a) Using objects to show groups of equal size
 - (b) Asking students to solve multiplication problems on paper
 - (c) Giving a lecture on the history of multiplication
 - (d) Asking students to memorize multiplication tables

28. The perimeter of a rectangle with vertices $A(0,0)$, $B(10,0)$, $C(10,2)$, and $D(0,2)$ is:
- (a) 20 units
 - (b) 22 units
 - (c) 24 units
 - (d) 26 units
29. To introduce "division" to Class IV students, which activity is most suitable?
- (a) Using objects to divide into equal groups
 - (b) Asking students to solve division problems on paper
 - (c) Giving a lecture on the history of division
 - (d) Asking students to memorize division tables
30. The area of a triangle with vertices $A(0,0)$, $B(7,0)$, and $C(3.5,7)$ is:
- (a) 12.25 square units
 - (b) 24.5 square units
 - (c) 35 square units
 - (d) 49 square units
31. To assess understanding of "shapes," which activity is most appropriate?
- (a) Asking students to draw shapes from memory
 - (b) Providing cut-outs of shapes and asking students to sort them
 - (c) Giving a lecture on the properties of shapes
 - (d) Asking students to memorize the names of shapes
32. The perimeter of a square with vertices $A(3,3)$, $B(7,3)$, $C(7,7)$, and $D(3,7)$ is:
- (a) 12 units
 - (b) 14 units
 - (c) 16 units
 - (d) 18 units
33. To teach "subtraction" to Class I students, which activity is most suitable?

- (a) Using objects to show the removal of items
 - (b) Asking students to solve subtraction problems on paper
 - (c) Giving a lecture on the history of subtraction
 - (d) Asking students to memorize subtraction facts
34. The perimeter of a rectangle with vertices A(0,0), B(7,0), C(7,1), and D(0,1) is:
- (a) 14 units
 - (b) 16 units
 - (c) 18 units
 - (d) 20 units
35. To teach "measurement of capacity" to Class III students, which activity is most suitable?
- (a) Using measuring cups to compare volumes of liquids
 - (b) Asking students to solve capacity problems on paper
 - (c) Giving a lecture on the history of measurement
 - (d) Asking students to memorize units of capacity
36. The perimeter of a triangle with vertices A(0,0), B(7,0), and C(0,7) is:
- (a) 14 units
 - (b) 17 units
 - (c) 21 units
 - (d) 24 units