

CTET Mathematics Practice Test

Paper I (For Classes I–V)

General Instructions

Practice Test - 27

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. The total number of prime factors of 120 is:
 - (a) 4
 - (b) 3
 - (c) 5
 - (d) 2
2. In the sequence 2, 6, 12, 20, 30, $\dots$, what is the next term?

- (a) 40
 - (b) 42
 - (c) 44
 - (d) 50
3. A teacher observes that a student repeatedly writes $400 + 50 + 8$ for the number 4580. This indicates a struggle with:
- (a) Adding large numbers.
 - (b) The concept of **zero** as a placeholder in the place value system.
 - (c) Factoring composite numbers.
 - (d) Measuring weight.
4. A rectangular field has an area of 150 square meters. If its length is 15 meters, what is the perimeter of the field?
- (a) 50 meters
 - (b) 60 meters
 - (c) 30 meters
 - (d) 40 meters
5. Which of the following is the simplified result of 2.5×0.2 ?
- (a) 5.0
 - (b) 0.5
 - (c) 0.05
 - (d) 50
6. The coordinates of the vertices of a parallelogram are $A(1, 3)$, $B(5, 3)$, $C(5, 7)$, and $D(1, 7)$. What type of quadrilateral is $ABCD$?
- (a) Rhombus
 - (b) Trapezoid
 - (c) Square
 - (d) Rectangle
7. What is the smallest fraction among $\frac{2}{5}$, $\frac{1}{2}$, $\frac{3}{10}$, $\frac{7}{20}$?
- (a) $\frac{2}{5}$
 - (b) $\frac{1}{2}$
 - (c) $\frac{3}{10}$

- (d) $\frac{7}{20}$
8. The primary objective of using **Formative Assessment** in a primary mathematics class is: (Pedagogy)
- (a) To record final grades for the term.
 - (b) To give specific, timely feedback to adjust teaching and learning while the instruction is ongoing.
 - (c) To compare students on a national standard.
 - (d) To justify the teacher's salary.
9. A box contains 12 dozen eggs. If 15 eggs are broken, how many whole eggs are left?
- (a) 144
 - (b) 129
 - (c) 109
 - (d) 139
10. A person buys 5 kg of apples for 300 units. If they sell them at 75 units per kg, what is the profit made on the entire transaction?
- (a) 175 units
 - (b) 75 units
 - (c) 50 units
 - (d) 100 units
11. Which of the following numbers is the greatest even 4-digit number that is exactly divisible by 5?
- (a) 9990
 - (b) 9995
 - (c) 9880
 - (d) 9980
12. The use of a **number line** is most suitable for visualizing and teaching which of the following concepts?
- (a) The volume of a cube.
 - (b) Comparison and ordering of whole numbers and fractions.
 - (c) The number of vertices of a cone.

- (d) Calculating the area of a trapezoid.
13. Simplify: $50 - 5 \times 4 + 16 \div 8$
- (a) 32
 - (b) 28
 - (c) 42
 - (d) 30
14. How many times does the digit '9' appear in the numbers from 1 to 100?
- (a) 10
 - (b) 19
 - (c) 20
 - (d) 21
15. A cylindrical water tank has a diameter of 2 meters and a height of 3 meters. What is the shape of the top view (projection onto the ground)?
- (a) Square
 - (b) Rectangle
 - (c) Circle
 - (d) Triangle
16. If 1 liter is 1000 cubic centimeters, how many cubic centimeters are there in $2\frac{1}{4}$ liters?
- (a) 2250 cubic cm
 - (b) 2500 cubic cm
 - (c) 2025 cubic cm
 - (d) 2205 cubic cm
17. Which pedagogical approach helps students understand the abstract concept of ****grouping and place value**** by moving from concrete objects to symbolic representation? (Pedagogy)
- (a) Memorization drills.
 - (b) The use of Base Ten Blocks and counting them in groups of ten and hundred.

- (c) Direct teacher lecture only.
 - (d) Skipping the concrete stage entirely.
18. A student is using an imperial measurement scale on a ruler when they were supposed to use the metric scale. This is an error in understanding:
- (a) The concept of perimeter.
 - (b) The use of ****standard units****.
 - (c) The divisibility rule for 5.
 - (d) The concept of time.
19. What is the sum of the place value of the digit '2' and the face value of the digit '4' in the number 12,345?
- (a) 2004
 - (b) 204
 - (c) 20004
 - (d) 24
20. A bus starts at 6 : 30 AM. It takes 1 hour 45 minutes to reach City A, and another 2 hours 10 minutes to reach City B. At what time does the bus arrive at City B?
- (a) 10 : 25 AM
 - (b) 10 : 15 AM
 - (c) 10 : 05 AM
 - (d) 10 : 35 AM
21. Which of the following is equivalent to $2\frac{1}{2} - 1\frac{1}{4}$?
- (a) $1\frac{1}{2}$
 - (b) $\frac{3}{4}$
 - (c) $1\frac{1}{4}$
 - (d) $1\frac{3}{4}$
22. When using a bar graph to represent the number of fruits sold (Apples: 50, Bananas: 30, Oranges: 40), the tallest bar represents:
- (a) Bananas
 - (b) Oranges

- (c) Apples
 - (d) The total number of fruits
23. The total number of line segments in a figure composed of a square and a triangle joined edge-to-edge (sharing one side) is:
- (a) 7
 - (b) 8
 - (c) 6
 - (d) 9
24. Which of the following is an example of the **Multiplicative Property of Zero**?
- (a) $5 + 0 = 5$
 - (b) $5 \times 1 = 5$
 - (c) $5 \times 0 = 0$
 - (d) $5 \div 5 = 1$
25. A key feature of an effective mathematics curriculum for primary children is that it should: (Pedagogy)
- (a) Focus strictly on memorizing theorems from higher classes.
 - (b) Be designed to **reduce the fear of mathematics** and encourage curiosity.
 - (c) Contain only problems with single, definite answers.
 - (d) Exclude all forms of real-life context.
26. If a whole number is both a factor of 18 and a multiple of 3, how many possible values can the number have?
- (a) 2
 - (b) 3
 - (c) 4
 - (d) 5
27. The coordinates of the vertices of a right-angled triangle are $A(1, 1)$, $B(5, 1)$, and $C(1, y)$. If the area is 6 square units, what is the possible value of y ?
- (a) 4

- (b) 5
 - (c) 6
 - (d) 7
28. What is the difference between $\frac{3}{4}$ of 80 and $\frac{1}{2}$ of 60?
- (a) 30
 - (b) 40
 - (c) 15
 - (d) 60
29. When a teacher uses ICT (like educational apps or interactive simulations) to teach geometry, the main benefit is: (Pedagogy)
- (a) It eliminates the need for any physical manipulatives.
 - (b) It allows for ****dynamic visualization**** and manipulation of shapes and properties that are difficult to show on a blackboard.
 - (c) It restricts students to only one method of problem-solving.
 - (d) It slows down the pace of instruction.
30. Which number, when divided by 7, gives a remainder of 5 and a quotient of 12?
- (a) 84
 - (b) 99
 - (c) 89
 - (d) 91
-