CTET Mathematics Practice Test

Paper I (For Classes I-V)

General Instructions

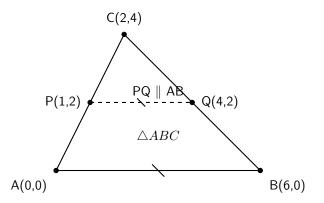
Practice Test - 15

- 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!

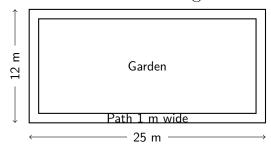
- 1. The smallest 4-digit number that is exactly divisible by 18 is:
 - (a) 1008
 - (b) 1002
 - (c) 1009
 - (d) 1010

2. A teacher draws a triangle ABC with coordinates A(0,0), B(6,0), and C(2,4). A line parallel to the base AB cuts the sides AC and BC at P(1,2) and Q(4,2), respectively. Which of the following statements is correct?



- (a) $\triangle APQ$ and $\triangle ABC$ are similar.
- (b) $\triangle APQ$ and $\triangle ABC$ are congruent.
- (c) PQ = 3AB.
- (d) The area of $\triangle APQ$ equals that of $\triangle ABC$.
- 3. If 1.25 kg of sugar costs Rs. 50, what is the cost of 3 kg of sugar?
 - (a) Rs. 100
 - (b) Rs. 120
 - (c) Rs. 150
 - (d) Rs. 160
- 4. Which property of multiplication is shown by the equation $7 \times (5+3) = 7 \times 5 + 7 \times 3$?
 - (a) Commutative Property
 - (b) Associative Property
 - (c) Distributive Property
 - (d) Identity Property
- 5. The sum of all odd numbers between 50 and 60 is:
 - (a) 255
 - (b) 275
 - (c) 285
 - (d) 275

- 6. A student solved $48 \div 4$ as 12, then checked by $12 \times 4 = 48$. This shows understanding of:
 - (a) Estimation
 - (b) Inverse relationship between multiplication and division
 - (c) Place value
 - (d) Addition of multiples
- 7. The perimeter of a square is 96 cm. Its area is:
 - (a) 576 cm^2
 - (b) 144 cm^2
 - (c) 324 cm^2
 - (d) 256 cm^2
- 8. A teacher gives students marbles to group and form equal sets. This activity develops the concept of:
 - (a) Subtraction
 - (b) Division as equal sharing
 - (c) Multiplication as repeated addition
 - (d) Measurement
- 9. A rectangular garden measures 25 m by 12 m. A path 1 m wide is constructed inside along the boundary. What is the area of the path?



- (a) 46 m^2
- (b) 72 m^2
- (c) 74 m^2
- (d) 70 m^2
- 10. Which of the following shapes has all sides equal but no right angles?
 - (a) Square

(b) Rectangle
(c) Rhombus
(d) Trapezium
11. A circle has centre at $(2,2)$ and passes through $(6,2)$. Find its radius.
(a) 2
(b) 3
(c) 4 (d) 5
12. A child confuses area with perimeter. Which teaching method will best address this misconception?
(a) Repetition of formulae
(b) Use of concrete models like tiles or paper cutouts
(c) Oral questioning only
(d) Assigning extra homework
13. In a class of 40 students, $\frac{1}{5}$ were absent. How many were present?
(a) 30
(b) 32
(c) 34
(d) 36
14. The teacher introduces subtraction of fractions by using paper strips divided into equal parts. This follows which learning approach?
(a) Abstract-first approach
(b) Drill-based approach
(c) Concrete-pictorial-abstract approach
(d) Theoretical approach
15. The average of 14, 18, and 20 is:
(a) 17
(b) 18
(c) 16
(d) 19

16.	A clock shows 2: 45. What will be the time after 3 hours 30 minutes?
	(a) 6:15
	(b) 5:45
	(c) 6:00
	(d) $5:30$
17.	Which of the following is not a property of even numbers?
	(a) Even $+$ Even $=$ Even
	(b) Even \times Odd = Odd
	(c) Even $\div 2$ = Whole number
	(d) Even $+ Odd = Odd$
18.	A pictograph shows five apples representing 10 fruits. What will represent 25 fruits?
	(a) 2 apples
	(b) 3 apples
	(c) 4 apples
	(d) 5 apples
19.	The temperature at 6 AM was 12°C and at noon it was 28°C. What is the rise in temperature?
	(a) 14°C
	(b) 15°C
	(c) 16°C
	(d) 17° C
20.	A teacher uses a number line to teach negative numbers. This method mainly supports:
	(a) Conceptual understanding
	(b) Memorization of rules
	(c) Abstract reasoning only
	(d) Algorithmic drill
21.	What is the sum of all prime numbers less than 20?
	(a) 72

	(b) 77
	(c) 78
	(d) 80
22.	In a data handling activity, 10 students recorded the number of siblings: $0, 1, 1, 2, 2, 2, 3, 3, 4, 4$. What is the mode?
	(a) 2
	(b) 3
	(c) 4
	(d) 1
23.	Which of the following is an open-ended question that promotes divergent thinking?
	(a) What is 9×8 ?
	(b) Write all possible rectangles that can have an area of 24 square cm. $$
	(c) What is the perimeter of a square of side 5 cm?
	(d) How many sides does a pentagon have?
24.	The product of two numbers is 144 and one of them is 12. Find the other number.
	(a) 10
	(b) 11
	(c) 12
	(d) 15
25.	A teacher designs a game of "number cards" to help children discover multiples and factors. This best represents:
	(a) Constructivist approach
	(b) Behaviorist approach

26. Which of the following is the **correct descending order** of decimals?

(a) 3.21, 3.12, 3.02

(d) Lecture method

(c) Rote-learning method

(b) 3.12, 3.02, 3.21

- (c) 3.02, 3.12, 3.21
- (d) 3.21, 3.02, 3.12
- 27. A teacher observes that a child consistently writes 24 as 42. This may indicate:
 - (a) Reversal error due to visual-spatial difficulty
 - (b) Poor memory
 - (c) Lack of concentration
 - (d) Lack of numerical knowledge
- 28. The total surface area of a cube with side 7 cm is:
 - (a) 294 cm^2
 - (b) 343 cm^2
 - (c) 392 cm^2
 - (d) 441 cm^2
- 29. Which tool is most suitable for assessing a student's understanding of 3D shapes?
 - (a) Written test
 - (b) Observation during hands-on model activity
 - (c) Oral recitation
 - (d) Multiple-choice quiz only
- 30. A child counts $0, 5, 10, 15, \ldots$ What concept is being developed?
 - (a) Skip counting
 - (b) Odd numbers
 - (c) Factors
 - (d) Division