

CTET Mathematics Practice Test

Paper I (For Classes I–V)

General Instructions

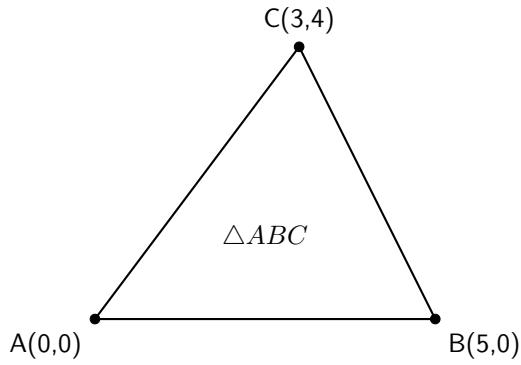
Practice Test - 10

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!

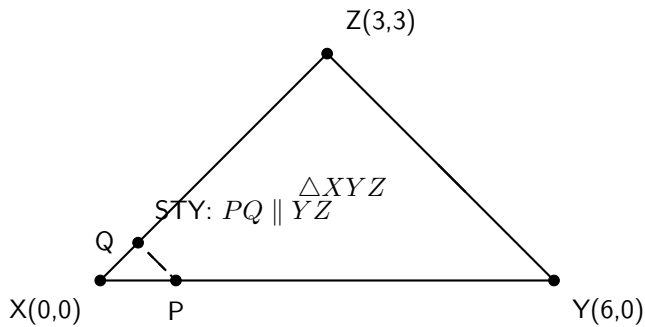
1. If the sum of three consecutive numbers is 51, the largest number is:
(a) 15
(b) 16
(c) 17
(d) 18
2. A car travels 180 km at a uniform speed of 60 km/h. If it increases its speed by 20 km/h, the time saved is:

- (a) 0.5 hours
 - (b) 0.75 hours
 - (c) 1 hour
 - (d) 1.5 hours
3. The numbers 24, 36, 60, 72. The LCM of these numbers is:
- (a) 360
 - (b) 720
 - (c) 180
 - (d) 240
4. A farmer has a rectangular field $120 \text{ m} \times 80 \text{ m}$. He wants to divide it into square plots with maximum size. Find the side of the square plot.
- (a) 10 m
 - (b) 20 m
 - (c) 40 m
 - (d) 60 m
5. Simplify: $\frac{7}{12} - \frac{1}{3} + \frac{5}{6}$.
- (a) $\frac{5}{4}$
 - (b) $\frac{3}{4}$
 - (c) $\frac{7}{6}$
 - (d) $\frac{4}{3}$
6. A sum of money triples itself in 10 years at simple interest. In how many years will it double itself?
- (a) 5 years
 - (b) 6.66 years
 - (c) 7 years
 - (d) 8 years
7. Find the area of a triangle with vertices A(0,0), B(5,0), C(3,4).



- (a) 10 sq units
- (b) 8 sq units
- (c) 12 sq units
- (d) 6 sq units

8. In $\triangle XYZ$, coordinates are $X(0,0)$, $Y(6,0)$, $Z(3,3)$. A line parallel to YZ intersects XY at P and XZ at Q . Coordinates of P and Q are:



- (a) $P(2,0)$, $Q(1,1)$
- (b) $P(3,0)$, $Q(1.5,1.5)$
- (c) $P(1,0)$, $Q(2,1)$
- (d) $P(2,0)$, $Q(2,1)$

9. A circle with center $(0,0)$ passes through point $(6,8)$. Find its equation.

- (a) $x^2 + y^2 = 100$
- (b) $x^2 + y^2 = 64$
- (c) $x^2 + y^2 = 36$
- (d) $x^2 + y^2 = 50$

10. A cube of side 5 cm is painted on all faces and cut into 1 cm cubes. How many small cubes have exactly two faces painted?

- (a) 12
 - (b) 24
 - (c) 8
 - (d) 6
11. A rectangular garden has length 50 m and width 30 m. A path 2 m wide runs inside along the boundary. Area of the path is:
- (a) 160 m^2
 - (b) 152 m^2
 - (c) 200 m^2
 - (d) 180 m^2
12. A cylindrical tank has diameter 14 m and height 10 m. Its volume is:
- (a) $1540\pi \text{ m}^3$
 - (b) 154 m^3
 - (c) $490\pi \text{ m}^3$
 - (d) $700\pi \text{ m}^3$
13. A pattern: 2, 6, 12, 20, 30, ... The 6th term is:
- (a) 36
 - (b) 42
 - (c) 48
 - (d) 56
14. The angle between hour and minute hands at 7:30 is:
- (a) 135°
 - (b) 150°
 - (c) 155°
 - (d) 140°
15. A shopkeeper sold an article at Rs 180 with a profit of 20%. The cost price is:
- (a) 150
 - (b) 140
 - (c) 160

- (d) 170
- 16.** A rectangular box has length 12 cm, width 8 cm, height 6 cm. Its diagonal is:
- (a) 14 cm
 - (b) 16 cm
 - (c) 18 cm
 - (d) 20 cm
- 17.** A school has 120 boys and 80 girls. One student is chosen randomly. Probability that the student is a girl is:
- (a) $\frac{1}{2}$
 - (b) $\frac{2}{5}$
 - (c) $\frac{3}{5}$
 - (d) $\frac{1}{3}$
- 18.** A triangle has vertices A(0,0), B(4,0), C(0,3). Find the perimeter.
- (a) 12
 - (b) 12.5
 - (c) 10
 - (d) 11
- 19.** Find the median of the numbers: 4, 7, 9, 10, 12, 15.
- (a) 9
 - (b) 9.5
 - (c) 10
 - (d) 10.5
- 20.** The mode of the data: 3, 5, 3, 8, 3, 2, 7 is:
- (a) 3
 - (b) 5
 - (c) 7
 - (d) 8

- 21.** A pictograph shows 1 symbol = 4 students. If 6 symbols represent boys and 9 symbols represent girls, ratio of boys to total students is:
- (a) 2:5
 - (b) 2:3
 - (c) 3:5
 - (d) 3:4
- 22.** Find the sum of the first 10 multiples of 3.
- (a) 165
 - (b) 150
 - (c) 155
 - (d) 180

- 23.** Demonstrating multiplication by grouping objects is an example of:
- (a) Abstract reasoning
 - (b) Concrete representation
 - (c) Pictorial reasoning
 - (d) Symbolic representation
- 24.** Asking students to predict the next term in a pattern develops:
- (a) Logical thinking
 - (b) Speed calculation
 - (c) Memorization
 - (d) Numerical operations
- 25.** Using flashcards to show fractions helps children understand:
- (a) Part-whole concept
 - (b) Place value
 - (c) Counting sequence
 - (d) Odd-even numbers
- 26.** When teaching area, letting students measure objects themselves is:
- (a) Experiential learning
 - (b) Lecture method
 - (c) Rote learning
 - (d) Group work only
- 27.** A child writes 45 as 54 consistently. Teacher should:
- (a) Explain place value using manipulatives
 - (b) Give more worksheets
 - (c) Punish for mistake
 - (d) Ignore the error
- 28.** Encouraging students to discuss their solutions helps in:
- (a) Developing communication and reasoning
 - (b) Memorization
 - (c) Speed calculation
 - (d) Only drills

29. Using 3D models for teaching shapes is helpful for:

- (a) Visual and tactile learning
- (b) Reading
- (c) Abstract reasoning only
- (d) Listening skills

30. Activities like sorting objects by color or size help in:

- (a) Developing classification and logical thinking
- (b) Arithmetic skills
- (c) Memorization
- (d) Language skills