

CTET Mathematics Practice Test

Paper I (For Classes I–V)

General Instructions

Practice Test - 09

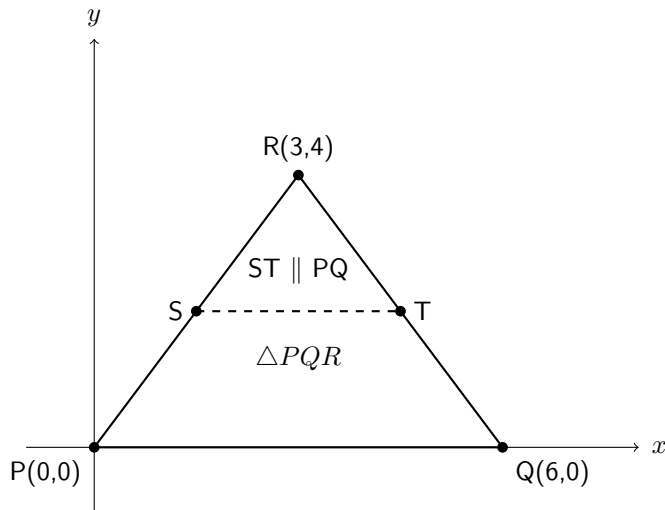
1. This paper contains a total of **30 questions**.
2. All questions are **compulsory**.
3. Each question carries **1 mark**.
4. There is **no negative marking**.
5. The maximum marks for this test are **30**.
6. The total duration of the test is **45 minutes**.
7. Choose the most appropriate answer 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 sum of squares of first 5 natural numbers is:
 - (a) 30
 - (b) 55
 - (c) 70
 - (d) 85
2. If $2x + 3y = 12$ and $x = 3$, find y .

- (a) 1
 - (b) 2
 - (c) 3
 - (d) 4
- 3.** A train travels 120 km at a uniform speed of 60 km/h. How long will it take to travel 180 km at the same speed?
- (a) 2 hours
 - (b) 2.5 hours
 - (c) 3 hours
 - (d) 3.5 hours
- 4.** Find the HCF of 48, 60, and 72.
- (a) 6
 - (b) 12
 - (c) 24
 - (d) 36
- 5.** A piece of cloth 6 m long is cut into pieces of 50 cm each. How many pieces can be obtained?
- (a) 10
 - (b) 12
 - (c) 15
 - (d) 20
- 6.** Simplify: $\frac{3}{4} + \frac{5}{8} - \frac{1}{2}$.
- (a) $\frac{3}{8}$
 - (b) $\frac{5}{8}$
 - (c) $\frac{7}{8}$
 - (d) 1
- 7.** The sum of angles of a pentagon is:
- (a) 540°

- (b) 360°
 (c) 720°
 (d) 450°
8. A cuboid has dimensions $8 \text{ cm} \times 5 \text{ cm} \times 3 \text{ cm}$. Find its total surface area.
- (a) 94 cm^2
 (b) 142 cm^2
 (c) 148 cm^2
 (d) 157 cm^2
9. Find the perimeter of a rectangle with length 12 cm and breadth 7 cm .
- (a) 38 cm
 (b) 39 cm
 (c) 40 cm
 (d) 41 cm
10. A line passes through points $A(2,3)$ and $B(5,7)$. Find the slope of the line.
- (a) 1
 (b) $\frac{3}{4}$
 (c) $\frac{4}{3}$
 (d) 2
11. Triangle with vertices $P(0,0)$, $Q(6,0)$, $R(3,4)$. A line parallel to base PQ intersects PR at S and QR at T . Coordinates of S and T are:



- (a) $S(1.5,2)$, $T(4.5,2)$
- (b) $S(2,1.5)$, $T(4,1.5)$
- (c) $S(1,2)$, $T(5,2)$
- (d) $S(2,2)$, $T(4,2)$

12. A circle has center $(0,0)$ and passes through $(6,8)$. Its radius is:

- (a) 8
- (b) 10
- (c) 6
- (d) 5

13. The area of a square with diagonal 10 cm is:

- (a) 50 cm^2
- (b) 25 cm^2
- (c) 100 cm^2
- (d) 75 cm^2

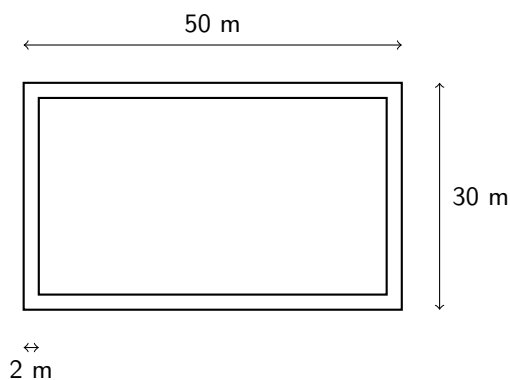
14. A cylindrical tank has radius 7 m and height 10 m. Find its volume.

- (a) 1540 m^3
- (b) $1540\pi \text{ m}^3$
- (c) $490\pi \text{ m}^3$
- (d) $700\pi \text{ m}^3$

15. The sum of two numbers is 45 and their difference is 9. Find the numbers.

- (a) 27 and 18
- (b) 30 and 15
- (c) 28 and 17
- (d) 25 and 20

16. A rectangular park of length 50 m and width 30 m has a path of 2 m width all around it. Find the area of the path.



- (a) 160 m^2
 (b) 320 m^2
 (c) 240 m^2
 (d) 200 m^2
- 17.** A cube of side 4 cm is painted on all sides and cut into 1 cm cubes. How many cubes have at least one face painted?
- (a) 56
 (b) 48
 (c) 32
 (d) 64
- 18.** A clock shows 9:15. Angle between hour and minute hands is:
- (a) 97.5°
 (b) 90°
 (c) 75°
 (d) 105°
- 19.** If a bag contains 3 red and 2 blue balls, the probability of picking a red ball is:
- (a) $\frac{3}{5}$
 (b) $\frac{2}{5}$
 (c) $\frac{1}{2}$
 (d) $\frac{1}{5}$
- 20.** A pattern sequence: 2, 4, 8, 16, ... The 6th term will be:

- (a) 32
- (b) 64
- (c) 128
- (d) 256

21. The median of 3, 7, 5, 9, 12 is:

- (a) 5
- (b) 7
- (c) 8
- (d) 9

22. A pictograph shows 1 symbol = 10 students. If 7 symbols represent girls and 5 symbols represent boys, ratio of boys to total students is:

- (a) 1:2
- (b) 5:12
- (c) 5:7
- (d) 7:12

- 23.** Using blocks to teach addition helps children move from:
- (a) Concrete to abstract
 - (b) Abstract to pictorial
 - (c) Symbolic to concrete
 - (d) Pictorial to symbolic
- 24.** Asking students to explain their reasoning develops:
- (a) Memorization
 - (b) Mathematical thinking
 - (c) Drill practice
 - (d) Speed calculation
- 25.** A child counts by twos using fingers. This represents:
- (a) Skip counting
 - (b) Addition
 - (c) Multiplication
 - (d) Place value
- 26.** When teaching measurement, letting students measure objects themselves is an example of:
- (a) Experiential learning
 - (b) Theoretical teaching
 - (c) Lecture method
 - (d) Rote practice
- 27.** Continuous assessment in mathematics focuses on:
- (a) Annual tests only
 - (b) Ongoing feedback and learning progress
 - (c) Class ranking
 - (d) Standardized exams only
- 28.** Demonstrating symmetry by folding paper helps in:
- (a) Conceptual understanding
 - (b) Memorization
 - (c) Speed solving

- (d) Oral expression
- 29.** For visually impaired students, learning geometric shapes is best supported through:
- (a) Tactile and 3D models
 - (b) Verbal description only
 - (c) Copying from board
 - (d) Flashcards
- 30.** Which of the following encourages logical reasoning in early primary students?
- (a) Pattern recognition and sequencing activities
 - (b) Memorizing multiplication tables
 - (c) Writing definitions repeatedly
 - (d) Solving large computations only