

CTET Mathematics Practice Test

Paper I (For Classes I–V)

General Instructions

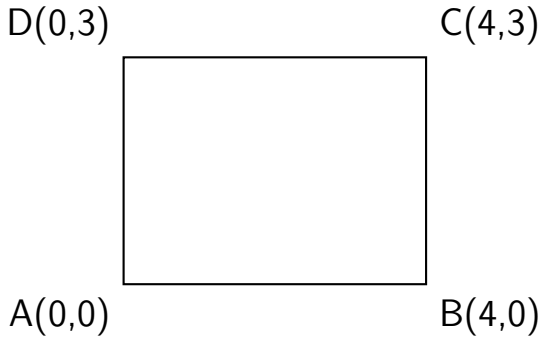
Practice Test - 06

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!

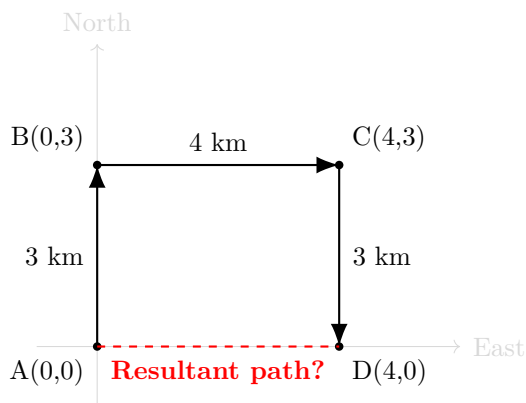
1. If $3x + 7 = 19$, find the value of x .
 - (a) 3
 - (b) 4
 - (c) 5
 - (d) 6
2. The sum of the first 15 even natural numbers is:

- (a) 120
 - (b) 210
 - (c) 240
 - (d) 260
3. A car covers 240 km in 4 hours. If the same car travels at half of this speed, the time taken to cover 180 km will be:
- (a) 6 hours
 - (b) 7 hours
 - (c) 8 hours
 - (d) 9 hours
4. The least number which when divided by 8, 12, and 20 leaves remainder 5 in each case is:
- (a) 245
 - (b) $245 + 5 = 250$
 - (c) $245 + 10 = 255$
 - (d) $245 + 15 = 260$
5. A shopkeeper mixes 20 kg of rice at Rs. 30/kg with 30 kg of rice at Rs. 40/kg. The average price per kg of the mixture is:
- (a) Rs. 35
 - (b) Rs. 36
 - (c) Rs. 37
 - (d) Rs. 38
6. Find the least number which is exactly divisible by 18, 24, and 32.
- (a) 144
 - (b) 288
 - (c) 384
 - (d) 576
7. The perimeter of a square and a rectangle are equal. The side of the square is 14 cm, and the breadth of the rectangle is 10 cm. Find its length.
- (a) 14 cm

- (b) 16 cm
(c) 18 cm
(d) 20 cm
8. A man spends $\frac{1}{3}$ of his income on food, $\frac{1}{5}$ on rent, and saves Rs. 500. If his total income is Rs. 3000, find his total expenditure.
- (a) Rs. 2500
(b) Rs. 2300
(c) Rs. 2200
(d) Rs. 2000
9. The sum of the reciprocals of two numbers is $\frac{1}{6}$ and their difference is 2. Find the numbers.
- (a) 4 and 6
(b) 6 and 8
(c) 8 and 10
(d) 10 and 12
10. A quadrilateral has vertices at A(0,0), B(4,0), C(4,3), and D(0,3). The area of the quadrilateral is:
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- (a) 10 sq units
(b) 12 sq units
(c) 15 sq units
(d) 12 sq units
11. The coordinates of a point dividing the line joining (2, 3) and (8, 9) in the ratio 1 : 2 internally are:
- (a) (4, 5)
(b) (5, 6)

- (c) (6, 7)
 - (d) (7, 8)
- 12.** If the line $y = 3x + 2$ passes through a circle with center $(-1, 2)$ and radius 5, then the line cuts the circle at:
- (a) Two points
 - (b) One point
 - (c) No point
 - (d) Cannot be determined
- 13.** A cuboid has dimensions 6 cm $\times$ 4 cm $\times$ 3 cm. Find its total surface area.
- (a) 108 cm²
 - (b) 132 cm²
 - (c) 148 cm²
 - (d) 156 cm²
- 14.** The diagonal of a square is 8 cm. Find the area of the square.
- (a) 32 cm²
 - (b) 48 cm²
 - (c) 64 cm²
 - (d) 80 cm²
- 15.** The perimeter of a circle with radius 7 cm is:
- (a) 22 cm
 - (b) 33 cm
 - (c) 44 cm
 - (d) 49 cm
- 16.** If the sum of two angles of a triangle is 85° , find the third angle.
- (a) 85°
 - (b) 90°
 - (c) 95°
 - (d) 100°

17. A boy walks 3 km north, then 4 km east, then 3 km south. Find his distance from the starting point



- (a) 2 km
 (b) 3 km
 (c) 4 km
 (d) 5 km
18. A circle has center $(0, 0)$ and passes through $(6, 8)$. Find its radius.
- (a) 5 units
 (b) 8 units
 (c) 10 units
 (d) 12 units
19. A cube of side 5 cm is melted to form small cubes of side 1 cm. Find the number of small cubes.
- (a) 25
 (b) 75
 (c) 100
 (d) 125
20. A coin is tossed twice. The probability of getting at least one head is:
- (a) $\frac{1}{4}$
 (b) $\frac{1}{2}$
 (c) $\frac{3}{4}$
 (d) 1
21. The sum of angles of a quadrilateral is:

- (a) 180°
- (b) 270°
- (c) 360°
- (d) 540°

22. The volume of a right circular cone of height 12 cm and radius 7 cm is:

- (a) $246\pi \text{ cm}^3$
- (b) $588\pi \text{ cm}^3$
- (c) $308\pi \text{ cm}^3$
- (d) $392\pi \text{ cm}^3$

- 23.** A child uses fingers to add $7 + 8$. This shows she is in which learning stage?
- (a) Abstract
 - (b) Symbolic
 - (c) Concrete–pictorial
 - (d) Reflective
- 24.** In teaching mathematics, “scaffolding” means:
- (a) Giving students complete solutions
 - (b) Providing structured support and gradually withdrawing it
 - (c) Repeating exercises for memorization
 - (d) Testing frequently
- 25.** A diagnostic test in mathematics is mainly used to:
- (a) Evaluate end-term performance
 - (b) Find specific learning difficulties
 - (c) Assign grades
 - (d) Compare with other schools
- 26.** The main purpose of using concrete objects in early number teaching is to:
- (a) Decorate classroom
 - (b) Keep children engaged
 - (c) Help children visualize abstract ideas
 - (d) Reduce teacher talk
- 27.** A teacher asks students to group shapes with equal sides together. The skill being developed is:
- (a) Memorization
 - (b) Classification
 - (c) Estimation
 - (d) Computation
- 28.** Which of the following promotes mathematical reasoning?
- (a) Copying solved examples

- (b) Asking “why” and “how” questions
 - (c) Memorizing formulas
 - (d) Writing definitions
- 29.** In an inclusive classroom, a visually impaired child can best learn geometry through:
- (a) Reading textbook only
 - (b) Using tactile diagrams and 3D models
 - (c) Listening to verbal descriptions alone
 - (d) Observing peers
- 30.** Continuous and Comprehensive Evaluation (CCE) in mathematics focuses on:
- (a) Annual exams
 - (b) Continuous learning progress and feedback
 - (c) Only oral assessment
 - (d) Elimination of homework