CTET Mathematics Practice Test

Paper I (For Classes I–V)

General Instructions

Practice Test - 17

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.

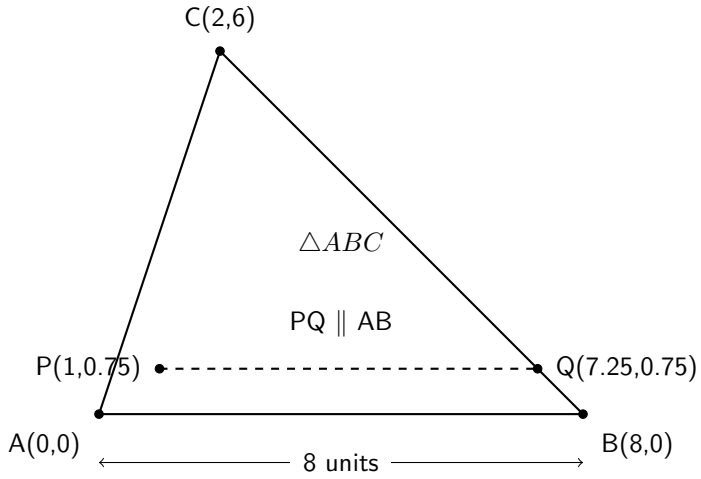
All the Best!

---

1. The least 4-digit number which is divisible by 12 and 15 is:

   (a) 1000
   (b) 1020
   (c) 1008
   (d) 1010

2. A triangle has vertices $A(0,0)$, $B(8,0)$ and $C(2,6)$. A line parallel to AB meets AC at $P(1,0.75)$ and BC at $Q(7.25,0.75)$. . Which relationship is true?



(a) $PQ \parallel AB$

(b) PQ is perpendicular to AB

(c) $PQ = AB$

(d) P, Q lie on the medians of $\triangle ABC$

3. If 15% of a number is 30, then the number is:

(a) 150

(b) 200

(c) 180

(d) 120

4. A circle with centre $O(3,3)$ passes through $P(6,3)$. What is the area of the circle (use π symbolically)?

(a) 9π

(b) 6π

(c) 3π

(d) 12π

5. A teacher asks pupils to make equal groups from 48 objects. If each group contains 8 objects, how many groups are formed?

(a) 6

(b) 5

(c) 4

(d) 8

6. A pattern: 7, 14, 28, 56, ... What is the 6th term?

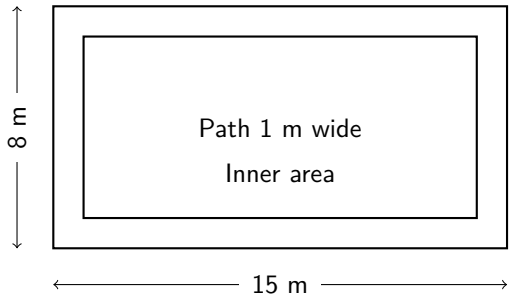
   (a) 224

   (b) 448

   (c) 112

   (d) 128

7. A rectangle has length 15 m and width 8 m. If a uniform path 1 m wide is constructed inside along all four sides, the area of the remaining inner rectangle is:



   (a) 11×6 m^2

   (b) 13×6 m^2

   (c) 13×7 m^2

   (d) 15×8 m^2

8. Which instructional method best supports concrete-to-abstract learning of fractions?

   (a) Start with symbolic rules, then manipulatives

   (b) Use paper fraction strips, then diagrams, then symbols

   (c) Teach only decimals first

   (d) Give timed drills on fraction addition

9. The sum of the interior angles of a polygon is 1260°. The polygon has how many sides?

   (a) 8

   (b) 9

   (c) 10

(d) 11

10. Convert $3\frac{1}{2}$ kilometres into metres:

    (a) 3500 m

    (b) 3250 m

    (c) 3000 m

    (d) 3600 m

11. A child arranges the numbers 1 to 9 in a 3x3 grid and claims the center number must be 5. Which pedagogical idea is being used if the teacher asks the child to justify the claim?

    (a) Encourage rote recall

    (b) Promote reasoning and justification

    (c) Discourage experimentation

    (d) Emphasize memorization

12. A school bus leaves at 8:20 and reaches at 9:05. What is travel time in minutes?

    (a) 35 minutes

    (b) 45 minutes

    (c) 55 minutes

    (d) 40 minutes

13. The place value of 7 in the number 47,826 is:

    (a) 70,000

    (b) 7,000

    (c) 700

    (d) 7

14. A box contains 30 pencils. If $\frac{1}{3}$ are broken and $\frac{1}{5}$ are coloured, how many are neither broken nor coloured?

    (a) 12

    (b) 18

    (c) 14

    (d) 16

15. A polygon has all sides equal and all interior angles equal. Which shape is this?

    (a) Square

    (b) Rectangle

    (c) Regular pentagon

    (d) Rhombus

16. A teacher uses story problems set in local market contexts. This practice primarily:

    (a) Helps transfer learning to real life

    (b) Makes problems harder

    (c) Decreases cultural relevance

    (d) Discourages group work

17. A right triangle has vertices at $(0, 0)$, $(6, 0)$ and $(6, 8)$. The hypotenuse length is:

    (a) 10

    (b) 8

    (c) 6

    (d) $\sqrt{100}$

18. If the probability of rain is $\frac{3}{10}$, what is the probability of no rain?

    (a) $\frac{7}{10}$

    (b) $\frac{3}{7}$

    (c) $\frac{10}{3}$

    (d) $\frac{1}{10}$

19. A cubic box has side 4 cm. How many 1 cm cubes make up the box?

    (a) 16

    (b) 64

    (c) 32

    (d) 48

20. To assess understanding of place value, a teacher asks students to represent 4,209 using base-ten blocks. This task is primarily:

    (a) Diagnostic and conceptual

(b) Memorization-based

(c) Speed-based

(d) Irrelevant to place value

21. Which of the following is an example of an open-ended mathematics question?

(a) What is $7 + 5$?

(b) Find all possible rectangles of area 12 sq. units.

(c) What is the square root of 81?

(d) What is 9 times 6?

22. A teacher uses a 100-grid to teach odd and even numbers. This is an example of:

(a) Using visual representation for number patterns

(b) Immediate assessment only

(c) Memorization strategy

(d) Subtracting technique

23. If the sum of three consecutive integers is 42, the integers are:

(a) 13, 14, 15

(b) 14, 14, 14

(c) 12, 14, 16

(d) 13, 13, 16

24. A circular pond has centre $(0, 0)$ and a point on the pond at $(0, 5)$. A tangent at $(0, 5)$ is:

(a) $y = 5$

(b) $x = 0$

(c) $x = 5$

(d) $y = 0$

25. The difference between the largest 3-digit number and the smallest 3-digit number is:

(a) 899

(b) 900

(c) 998

(d) 999

26. A child adds fractions $\frac{1}{2} + \frac{1}{3}$ and writes $\frac{2}{5}$. The best remedial strategy is:

    (a) Use fraction strips to compare parts and find a common denominator

    (b) Give more similar problems to practice

    (c) Mark the response wrong without discussion

    (d) Move to decimal form immediately

27. The perimeter of an equilateral triangle with side s is:

    (a) s

    (b) $2s$

    (c) $3s$

    (d) $4s$

28. A teacher wants to check conceptual understanding of multiplication. Which task is most appropriate?

    (a) Ask children to draw arrays representing 4×6

    (b) Ask children to memorize tables

    (c) Timed drills on multiplication only

    (d) Give only word problems