



MUMBAI MATH CHAMPIONSHIP

MOCK TEST – Grade 5

Total Marks: 100

Time Duration: 1 hour

Section: Logical Reasoning

Q.1 (Large numbers)

If $742 + 690 = 1,432$; then what is $74,200 + 69,000$?

- a) 1,02,523
- b) 1,43,200
- c) 14,320
- d) 10,43,200

Q.2 (Fractions)

Find the missing numbers:

$$\frac{7}{6} \times \frac{19}{?} = \frac{?}{54}$$

- a) $\frac{7}{6} \times \frac{19}{7} = \frac{33}{54}$
- b) $\frac{7}{6} \times \frac{19}{8} = \frac{123}{54}$
- c) $\frac{7}{6} \times \frac{19}{9} = \frac{45}{54}$
- d) $\frac{7}{6} \times \frac{19}{9} = \frac{133}{54}$

Q.3 (Measuring time)

In a year, if 3rd July is Wednesday, which other dates in this month will fall on Wednesday?

- a) 7, 14, 21, 28
- b) 9, 16, 23, 30



c) 10, 17, 24, 31

d) 6, 12, 21, 30

Q.4 (Perimeter and area)

The perimeter of a rectangle is 16 m. If the breadth is 3 m, find the length of the rectangle.

a) 4m

b) 5m

c) 6m

d) 7m

Q.5 (Roman numerals)

What will be the quotient and remainder if XVIII is divided by IV?

a) Quotient = IV, Remainder = II

b) Quotient = III, Remainder = II

c) Quotient = IV, Remainder = III

d) Quotient = VI, Remainder = II

Section: Mental Maths

Q.6 (Number system)

What is the value of the digit in the ten thousand's column in 4,56,852?

a) 5,000

b) 800

c) 50,000

d) 5,00,000

Q.7 (Roman numerals)

What will be the result (in Roman numerals)?

IX - IV + XIII - VI

- a) IX
- b) VI
- c) XII
- d) XI

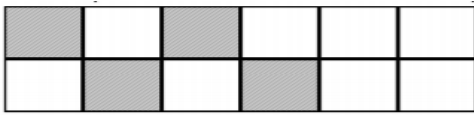
Q.8 (Large numbers)

How much is $136-135+128-127+113-112+119-117$?

- a) 2
- b) 3
- c) 4
- d) 5

Q.9 (Fractions)

What is the simplest form of the fraction that is represented by the shaded portion?



- a) $\frac{1}{3}$
- b) $\frac{2}{3}$
- c) $\frac{2}{6}$
- d) $\frac{1}{4}$

Q.10 (Measuring time)

Duration of a live music concert is 5 hours 15 minutes. If the concert finished at 06:45 p.m., at what time did it start?

- a) 01:45 p.m.
- b) 01:30 p.m.



c) 01:45 a.m.

d) 01:30 a.m.

Q.11 (Multiples and factors)

A square number and a prime number have a total of 42. What are the two numbers?

$$\begin{array}{c} \square \\ \text{Square} \\ \text{number} \end{array} + \begin{array}{c} \square \\ \text{Prime} \\ \text{number} \end{array} = 42$$

a) 16, 11

b) 8, 17

c) 25, 17

d) 36, 5

Q.12 (Perimeter and area)

How many cards of length 12 cm and width 5 cm can be made out of a sheet having area 300 sq. cm.?

a) 10 cards

b) 60 cards

c) 6 cards

d) 5 cards

Q.13 (Problems on measurement)

Your school is 5 km 25 m from your house. Express this distance in meters.

a) 525 meters

b) 5.25 meters

c) 5, 025 meters

d) 50, 250 meters

Q.14 (Decimals and fractions)

Simplify:

$$20.5 - 0.05 \times 100 + 6.7$$

- a) 20.45
- b) 20.2
- c) 22.2
- d) 15.5

Q.15(Large numbers)

Fill in the missing number:

$$\begin{array}{r} 5,518 \\ - \quad \square \\ \hline 5,196 \end{array}$$

- a) 300
- b) 322
- c) 432
- d) 482

Section: Maths

Q.16 (Fractions)

Divide:

$$6\frac{1}{4} \text{ by } 2\frac{1}{2}$$

- a) $\frac{6}{2}$
- b) $\frac{5}{2}$
- c) $\frac{2}{4}$

d) $\frac{7}{8}$

Q.17(Perimeter and area)

A square box measures 8 m by 8 m. A rectangular box is 3 m longer and 1 m shorter than the square box. What is the difference in area between the two boxes?

a) 11 m^2

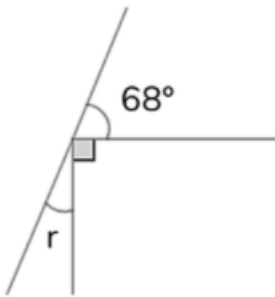
b) 12 m^2

c) 13 m^2

d) 14 m^2

Q.18 (Shapes and angles)

Find angle r in the given diagram.



a) 24°

b) 22°

c) 32°

d) 68°

Q.19 (Large numbers)

Rama bought a box with chocolate and strawberry muffins. There were 7 more chocolate muffins than strawberry muffins, and there were 17 muffins in all. How many chocolate muffins did Rama buy?

a) 17

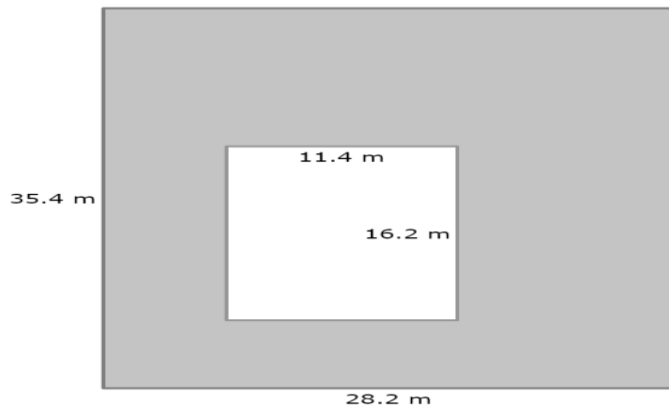
b) 12

c) 5

d) 7

Q.20 (Perimeter and area)

Find the area of the shaded region.



a) 1, 182.96 m²

b) 122 m²

c) 316.5 m²

d) 813.6 m²

Q.21 (Perimeter and area)

A man covers 88 cm while going round a square park twice. What is the length of a side of the park?

a) 22 cm

b) 11cm

c) 44cm

d) 33cm

Q.22 (Large numbers)

Solve the below question:

$$354 - (212 - 12^2) \times 14 + 72$$



- a) 175
- b) 154
- c) 130
- d) 144

Q.23 (Perimeter and area)

The difference in area of two squares is 700 sq. m. If the side of bigger square is 40 m, then what is the side of smaller square?

- a) 70 m
- b) 400m
- c) 1, 600 m
- d) 30 m

Q.24 (Large numbers)

A stack of 17 identical books is 153 cm wide. Jack takes 8 books off the left-hand side. How wide is the set of books now?

- a) 81 cm
- b) 91 cm
- c) 21.82 cm
- d) 17 cm

Q.25 (Mixed)

$$\left(4 \times \frac{2}{3}\right) \times \left(6 + \frac{3}{2}\right) \times \frac{1}{2} = ?$$

- a) 10
- b) 20
- c) 30



d) 40

Q.26 (Perimeter and area)

A mat of 26 m X 19 m was bought at the cost of Rs.68, 666. What is its cost per square meter?

a) Rs.687

b) Rs.666

c) Rs.175

d) Rs.139

Q.27 (Large numbers)

Reyaan is making house using matchsticks. Each house needs 68 matchsticks. She has 4 boxes of 391 matchsticks each. How many houses can Reyaan make using all the matchsticks?

a) 23

b) 41

c) 97

d) 32

Q. 28(Decimals and fractions)

Simplify:

$$\frac{40 \times 0.4 \times 0.04}{4 + 4 \div 4}$$

a) 0.125

b) 0.128

c) 0.122

d) 0.178

Q.29(Large numbers)

Complete the pattern:



$$90 \div \square = 30$$

$$900 \div \square = 300$$

$$9,000 \div \square = 3,000$$

a) 10, 10, 10

b) 10, 20, 30

c) 3, 3, 3

d) 3, 30, 300

Q.30 (Large number)

Solve:

$$17 - (35 \div 5) + 8 \times 2$$

a) 25

b) 26

c) 27

d) 28

Section: Achiever Section

Q.31 (Roman Numerals)

Arrange in ascending order:

XII+II, XVII+III, VIII+XI, XIX-VI

a) XII+II, XIX-VI, XVII+III, VIII+XI

b) XIX-VI, XII+II, VIII+XI, XVII+III

c) XII+II, XIX-VI, XVII+III, VIII+XI

d) XIX-VI, VIII+XI, XII+II, XVII+III,

Q. 32(Algebra)

Ashok chooses a number between 1 and 50. He divides the number by 3 and then subtracts 4. He then divides the result by 2. His answer is 4.5. What was the number he started with?

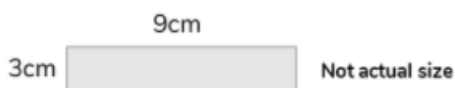
- a) 29
- b) 39
- c) 18
- d) 25

Q. 33(Decimal fractions)

Tom runs $\frac{4}{5}$ of a km, Ashok runs $\frac{8}{25}$ of a km, Shyam runs $\frac{1}{2}$ of a km. What is the total distance that they run? Express your answer as a decimal.

- a) 1.25 km
- b) 1.45 km
- c) 1.62 km
- d) 0.62 km

Q.34 (Perimeter and area)



This shape below is made by stacking six of the rectangles above, on top of each other.



What is the perimeter of this shape?

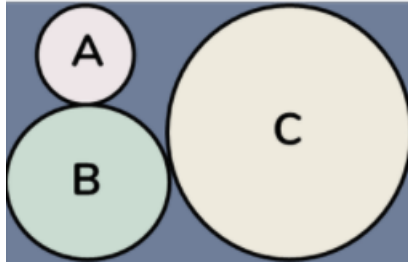
- a) 64 cm
- b) 108 cm

c) 86 cm

d) 54 cm

Q.35 (Circles)

Here are three circles. The radius of circle A is 13 cm, and the radius of circle B is 22 cm. Find the radius of circle C?



a) 30 cm

b) 15 cm

c) 35 cm

d) 72 cm

Q.36 (Large numbers)

Rama rented a boat for 3 hours a day. If he was charged Rs9, 540 for 6 days, how much would his friend Harry need to pay to rent the same boat for 5 hours?

a) Rs2, 650

b) Rs3, 650

c) Rs2, 758

d) Rs3, 658

Q. 37(Algebra)

A regular cake takes 30 minutes to bake for each kilogram of cake plus an extra 15 minutes to cool. How long does it take for a 2 kg cake?

a) 105 minutes

b) 75 minutes



- c) 45 minutes
- d) 120 minutes

Q.38 (Circle)

The difference between the circumference and the diameter of a circular band is 5 cm. Find the radius of the band. (Take $\pi = \frac{22}{7}$)

- a) 1.133 cm
- b) 2.33 cm
- c) 1.133 cm
- d) 1.166 cm

Q.39(Mixed)

Find the odd one out:

$XIII - VI$, $18 - 17 + 27 - 21$, Diameter of a circle with radius $3.556 \div 6$

- a) $XIII - VI$
- b) $18 - 17 + 27 - 21$
- c) Diameter of a circle with radius 3.5
- d) $56 \div 6$

Q.40(Large numbers)

A pack of paper has 170 sheets. 4 children each take 9 sheets. The teacher adds 45 more sheets to the pack. How many sheets of paper are left in that pack?

- a) 178
- b) 177
- c) 156
- d) 179



ANSWERS:

1. B
2. D
3. C
4. B
5. A
6. C
7. B
8. D
9. A
10. B
11. C
12. D
13. C
14. C
15. B
16. B
17. C
18. B
19. B
20. D
21. B
22. B
23. D
24. A
25. A
26. D
27. A
28. B
29. C
30. B
31. B
32. B
33. C
34. D
35. C
36. A
37. B



38. D

39. C

40. D