

P6 MATHEMATICS TEST

Total: 100 marks | Suggested time: 50 minutes

School: _____ Class: _____ No.: _____

Name: _____ Date: _____

Instructions: Give exact answers for terminating decimals. Round only recurring or non-terminating decimals to 2 decimal places. Give fractions in simplest form.

Part 1: Calculations (2 marks each, 20 marks)

1. $148 \div 12 =$ _____

2. $5.6 \times 0.75 =$ _____

3. $(24 - 18.6 \div 3) \times 0.8 =$ _____

4. $3.45 + 2.8 \times 0.5 =$ _____

5. $62.4 \div (1.2 \times 4) =$ _____

6. $(7.5 - 2.38) \div 0.4 =$ _____

7. $9.6 \div 0.16 =$ _____

8. $(15.2 + 4.8) \div 2.5 =$ _____

9. $0.375 \times 24 =$ _____

10. $18 - 6.75 \div 0.9 =$ _____

Part 2: Number Conversion (2 marks each, 16 marks)

11. $0.625 \rightarrow$ fraction: _____

12. $4.2 \rightarrow$ fraction: _____

13. $35\% \rightarrow$ decimal: _____

14. $1 \frac{3}{5} \rightarrow$ decimal: _____

15. $0.08 \rightarrow$ percentage: _____

16. $\frac{7}{20} \rightarrow$ percentage: _____

17. $125\% \rightarrow$ fraction: _____

18. $2.75 \rightarrow$ fraction: _____

Part 3: Ordering (4 marks each, 8 marks)

19. Arrange in ascending order: 0.4, $\frac{3}{5}$, 45%, 0.62

_____ < _____ < _____ < _____

20. Arrange in descending order: 1.2, 110%, $\frac{5}{4}$, 1.18

_____ > _____ > _____ > _____

Part 4: Average (4 marks each, 8 marks)

21. The scores of five tests are 72, 68, 75, 80 and 65. Find the average score.

WORKING:

Answer: _____

22. A group originally had 4 members with an average height of 1.56 m. A new member of height 1.68 m joins. Find the new average height.

WORKING:

Answer: _____ m

Part 5: Capacity and Volume (4 marks each, 12 marks)

23. 2500 mL = _____ L 24. 1.8 L = _____ cm^3

25. A measuring cylinder contains 600 mL of water. A stone of volume 180 cm^3 is fully submerged without any water spilling. Find the new reading.

WORKING:

Answer: _____ mL

Part 6: Word Problems (6 marks each, 18 marks)

26. A pencil costs \$4.80. With \$50, how many pencils can be bought at most, and how much money is left?

WORKING:

Answer: _____

27. Fruit candies cost \$12.50 per pack and chocolates cost \$9.80 per pack. Emily buys 3 packs of fruit candies and spends the rest of \$78 on chocolates. How many complete packs of chocolates does she buy?

WORKING:

Answer: _____

28. A water tank has a base area of 400 cm^2 and an initial water depth of 10 cm. An object of volume 1200 cm^3 is fully submerged without spilling water. By how much does the water level rise?

WORKING:

Answer: _____ cm

Part 7: Volume and Water Level (9 marks each, 18 marks)

29. An open rectangular box has external dimensions 40 cm by 25 cm by 20 cm. Its walls and base are 1 cm thick. Find its internal capacity in litres.

WORKING:

Answer: _____ L

30. A rectangular tank has a base 30 cm by 20 cm. The water depth rises from 6 cm to 8.4 cm when 3 identical metal objects are fully submerged, without spilling water. (a) Find the rise in water level. (b) Find the volume of each object.

WORKING:

Answer: _____