

Year 7 Mathematics test

Term 1, End-of-term Test

Name: _____

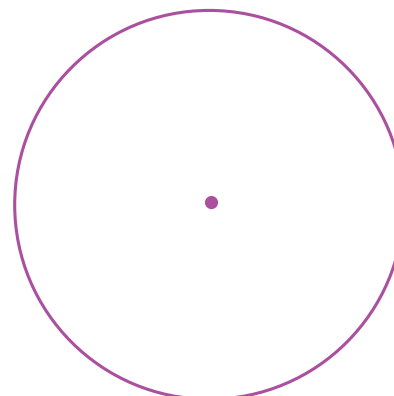
Class: _____ Date: _____

- 1 Three numbers have a mean of 10 and a mode of 8.
Write the three numbers.

- 2 The table shows the number of cars of each colour in a show room.

- a) Complete the table.
- b) Draw a pie chart for the data.

Colour	Frequency	Angle
Black	6	
Silver	5	
White	2	
Red	7	



3 Work out

a) $992 \div 32$ _____

b) Use your answer to part a to write the answer to $1024 \div 32$

4 Find the missing numbers.

a) $8 - \square = 21$

b) $8 - \square = -21$

c) $-7 \times \square = -21$

d) $-84 \div \square = 21$

5 Work out

$\sqrt[3]{(27)} \times (-1 - \sqrt{16})$ _____

6 Write an expression for

a) 2 more than p _____

b) double q _____

c) half of r _____

7 Max has a Saturday job and he earns \$8 per hour.

- a) Write a formula connecting the amount he is paid, in dollars, D , with the number of hours he works, h .

It costs Max \$5 for a return ticket to travel to work.

- b) Write a formula connecting the amount of money Max makes, in dollars, M , by working on Saturday, with the number of hours he works, h .

8 Simplify

$$2x + 2y + x + 3x - y \quad \underline{\hspace{2cm}}$$

9 Simplify

$$2x^2 + 2y + 3x^2 + 3x - 3y^3 \quad \text{by collecting like terms}$$

3

2

2

10 Find the value of each expression when $a = 2$ and $b = -4$

a) $3a + b$ _____

b) $5a - 2b$ _____

11 Find the value of each expression when $c = 5$ and $d = 7$

a) $3 + c^2$ _____

b) $(2c - d)^2$ _____

c) $7x(3 - 2x)$ _____

12 Expand

a) $x(x + 4)$ _____

b) $x(3 - 2x)$ _____

13 Factorise

a) $12x + 15$ _____

b) $32 - 24x$ _____

c) $2x - 24x^2$ _____

3

4

4

14 Write

- a) $2\frac{4}{7}$ as an improper fraction.

- b) $\frac{37}{5}$ as a mixed number.

- 15** Each Year 7 student does an indoor sport: table tennis, badminton or squash. In form 7TW, there are 24 students and three eighths play table tennis, one third play badminton.

- a) Work out how many more students in 7TW play table tennis than play badminton.

- b) Work out what fraction of students in 7TW play table tennis or badminton.

- c) Work out what fraction of students in 7TW play squash.

2

1

1

4

16 Ayesha has some beads in a bag.
One quarter of these are blue, 35% are yellow
and the rest are red.

a) Work out the percentage of red beads.

_____ %

b) Work out the smallest number of beads that
there can be of each colour.

17 Work out

a) $\frac{3}{7} \times \frac{9}{14}$ _____

b) $\frac{3}{7} \div \frac{9}{14}$ _____

4

4

i

Total for test : 55 marks

My score: marks

?

What went well

How to improve

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DRAFT