

MATHS ASSIGNMENT 1

QUESTION 1

1 Work out $-4 \times -\frac{7}{9}$

Circle your answer.

[1 mark]

$$-\frac{28}{36}$$

$$-\frac{28}{9}$$

$$\frac{28}{36}$$

$$\frac{28}{9}$$

QUESTION 2

2 Circle the value of $(\sqrt{6})^4$

[1 mark]

12

36

10

$\sqrt{24}$

QUESTION 3

3 $0.203 = \frac{1}{5} + x$

Circle the value of x .

[1 mark]

$$\frac{1}{300}$$

$$\frac{1}{3000}$$

$$\frac{3}{100}$$

$$\frac{3}{1000}$$

QUESTION 4

4 Circle the correct statement.

[1 mark]

$3x \equiv x + 2x$

$3x \equiv 2$

$3x + x \equiv 2 - x$

$3x + x - 2 \equiv 0$

QUESTION 5

5 Divide 62 in the ratio 3 : 7

[3 marks]

QUESTION 6

8 Work out $\left(\frac{7}{10} - \frac{4}{15}\right) \div \frac{2}{3}$

Give your answer as a fraction.

[3 marks]

QUESTION 7

13 Work out $0.4\dot{7} + 0.312$
Circle your answer.

[1 mark]

- 0.782 0.789 0.789 $\dot{7}$ 0.7 $\dot{8}\dot{9}$

QUESTION 8

QUESTION 10

- 1 Which of these is the equation of a straight line?
Circle your answer.

[1 mark]

$$y = 6x^2$$

$$y = x - 6$$

$$y = x^2 + 6$$

$$y = \frac{6}{x}$$

QUESTION 11

- 2 What is 0.28 as a fraction of 0.8 ?
Circle your answer.

[1 m]

$$\frac{7}{20}$$

$$\frac{2}{7}$$

$$\frac{20}{7}$$

$$\frac{7}{2}$$

QUESTION 12

- 3 Circle the calculation that increases 240 by 7.5%

[1 mark]

$$240 \times 1.0705$$

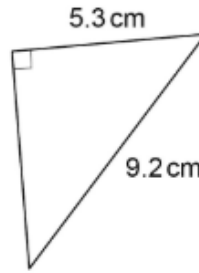
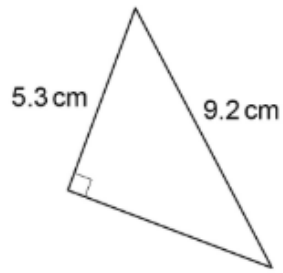
$$240 \times 1.705$$

$$240 \times 1.075$$

$$240 \times 1.75$$

QUESTION 13

4



Not drawn accurately

Circle the reason why the triangles are congruent.

[1 mark]

ASA

RHS

SAS

SSS

QUESTION 14

5

Work out $80\,000\,000 \div 200$

Give your answer in standard form.

[2 marks]

Answer _____

QUESTION 15

6 (a) Work out $\frac{3^{12}}{3^7}$

Give your answer as a whole number.

[2 marks]

Answer _____

6 (b) Simplify $8 \times 2^6 \times 2^4$

Give your answer as a power of 2

[2 marks]

QUESTION 16

9 (a) In each box, write a fraction **less** than 1 to make a correct calculation.

[1 mark]

$$\boxed{\phantom{\frac{\quad}{\quad}}} \times \boxed{\phantom{\frac{\quad}{\quad}}} = \frac{3}{10}$$

9 (b) In each box, write a decimal **less** than 1 to make a correct calculation.

[1 mark]

$$\boxed{} \times \boxed{} = 0.06$$

QUESTION 17

13 Solve $\frac{2w}{15} = \frac{4}{5}$

[2 marks]

$w =$ _____

QUESTION 18

24 (a) Simplify fully $\frac{6}{a} - \frac{11}{4a}$

[2 marks]

Answer _____

24 (b) Simplify fully $(y^2 - 3y) \times \frac{y^2 + 10y + 21}{y^2 - 9}$

[4 marks]