

Revision topic: Fractions, decimals and percentages

Q1 Circle the decimal that is greater than $\frac{3}{10}$ and less than $\frac{2}{5}$

0.32

0.035

0.4

0.24

(Total 1 mark)

Q2.

(a) Complete the table.

Fraction	Decimal	Percentage
$\frac{3}{4}$		75%
$\frac{9}{10}$	0.9	
	0.3	30%

(3)

(b) Write $\frac{3}{4}$, 0.9 and 30% in order with the smallest first.

Answer _____, _____, _____

(1)

(Total 4 marks)

Q3.

(a) (i) Write $\frac{1}{4}$ as a percentage.

Answer _____ %

(1)

(ii) Write 30% as a decimal.

Answer _____

(1)

- (iii) Write $\frac{1}{4}$, 30% and 0.2 in order with the smallest first.

Answer _____

(1)

- (b) Complete the following.

(i) $\frac{2}{3} = \frac{\square}{18}$

(1)

(ii) $\frac{\square}{4} = \frac{15}{20}$

(1)

- (c) Work out $\frac{3}{8}$ as a decimal.

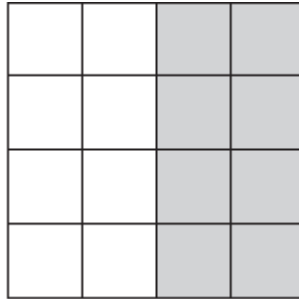
Answer _____

(2)

(Total 7 marks)

Q4.

(a) Here is a square grid.

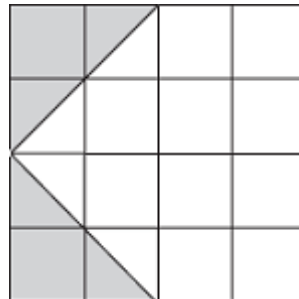


What percentage of the grid is shaded?

Answer _____ %

(1)

(b) Here is another square grid.

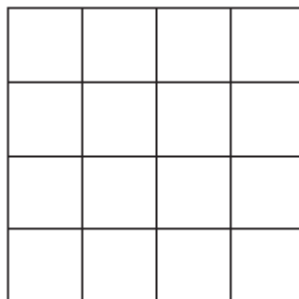


What fraction of the grid is shaded?
Give your answer in its simplest form.

Answer _____

(2)

(c) Shade $\frac{1}{8}$ of this square grid.



(1)
(Total 4 marks)

Q5.

In each part, circle the odd one out.

Give a reason for your answer.

- (a) 75% $\frac{3}{4}$ 0.75 7.5

Reason _____

(1)

- (b) $\frac{2}{6}$ $\frac{4}{10}$ $\frac{6}{18}$ $\frac{8}{24}$

Reason _____

(1)

- (c) $\sqrt{64}$ $\sqrt{81}$ $\sqrt{125}$ $\sqrt{144}$

Reason _____

(1)

- (d) 11 13 15 17

Reason _____

(1)

(Total 4 marks)

Q6.

- (a) Write 80% as a decimal.

Answer _____

(1)

- (b) Write 0.7 as a fraction.

Answer _____

(1)

- (c) Write $\frac{3}{4}$ as a decimal.

Answer _____

(1)

- (d) Write 80%, 0.7 and $\frac{3}{4}$ in order with the smallest first.

Answer _____ , _____ , _____

(1)

(Total 4 marks)

Q7.

Use your calculator to change $\frac{27}{64}$ to a decimal.

- (a) Write down your full calculator display.

Answer _____

(1)

- (b) Give your answer to part (a) to 3 decimal places.

Answer _____

(1)

(Total 2 marks)

Q8.

Which is bigger, 0.38 or $\frac{3}{8}$?

You **must** show your working.

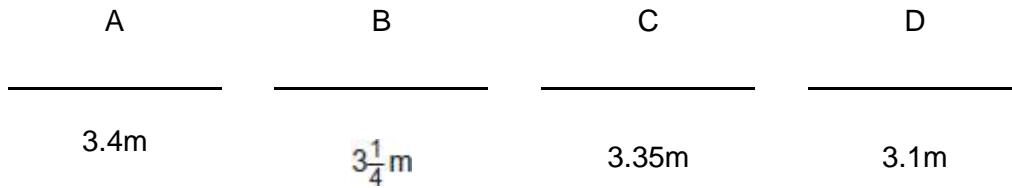
Answer _____

(Total 3 marks)

Q9.

Here are four rods.

Not drawn accurately



(a) Which rod is the longest?

Answer _____

(1)

(b) Work out the total length of rod C and rod D.

Answer _____ m

(1)

(c) Which **three** rods have a total length of 10 metres?

Answer _____ and _____ and _____

(2)

(Total 4 marks)

Q10.

(a) Put these in order starting with the smallest.

33.3 $\frac{1}{3}$ -0.3 3.03

Answer _____ , _____ , _____ , _____

(2)

(b) Jo thinks the difference between -0.3 and 33.3 is 33 .

Is she correct?

Tick a box.

Yes

No

Show clearly how you decide.

(2)
(Total 4 marks)

Q11.

Complete the table.

Fraction	Decimal	Percentage
$\frac{1}{2}$		50%
$\frac{3}{4}$	0.75	
	0.10	10%

(Total 3 marks)

Q12.

Write $\frac{8}{11}$ as a recurring decimal.

Answer _____

(Total 2 marks)

Q13.

- (a) Write 3.574 to 1 decimal place.

Answer _____ (1)

- (b) Put these decimals in order, starting with the smallest.

0.5 0.62 0.325

Answer _____ , _____ , _____ (1)

- (c) Circle the
- two**
- values that are equivalent to 0.8

8% $\frac{4}{5}$ 80% $\frac{8}{100}$ $\frac{1}{8}$

(2)
(Total 4 marks)

Q14.

Circle the **three** values that are greater than $\frac{1}{2}$

0.32 65% $\frac{1}{4}$ 0.76 $\frac{2}{3}$ 40%

(Total 3 marks)

Q15.

- (a) Three of these fractions are equivalent.

Circle the odd one out.

$\frac{2}{8}$ $\frac{3}{12}$ $\frac{4}{10}$ $\frac{5}{20}$

(1)

- (b) Write
- $\frac{3}{4}$
- as a percentage.

Answer _____ % (1)

- (c) Write 0.3 as a percentage.

Answer _____ % (1)

(Total 3 marks)

Q16.

Complete the table.

Fraction	Decimal	Percentage
$\frac{1}{4}$	0.25	
$\frac{2}{5}$		40%
	0.9	90%

(Total 3 marks)**Q17.**

Write these values in order, starting with the smallest.

$\frac{1}{10}$

0.2

11%

You **must** show your working.

Answer _____

(Total 3 marks)**Q18.**

(a) Write 30% as a fraction.

Answer _____

(1)

(b) Write 80% as a decimal.

Answer _____

(1)

(c) Circle the **two** values that are equivalent to $\frac{2}{3}$

$\frac{66}{100}$

$0.\dot{6}$

60%

$\frac{66}{99}$

0.6

(2)

(Total 4 marks)

Q19.

Put these in order starting with the smallest value.

$\frac{13}{4}$

$3\frac{1}{2}$

3.15

$\sqrt{9}$

You **must** show your working.

Smallest _____

Largest _____

(Total 3 marks)

Q20.

Circle the decimal that has the same value as $\frac{4}{5}$

0.04

0.4

0.45

0.8

(Total 1 mark)

Q21.

Circle the decimal that is greater than $\frac{1}{5}$ and less than $\frac{1}{4}$

0.152

0.200

0.215

0.251

(Total 1 mark)

Q22.

(a) Circle the percentage that is greater than $\frac{3}{4}$ and less than $\frac{4}{5}$

75%

78%

80%

82%

(1)

(b) Circle the fraction that is greater than 0.3 and less than 0.4

$\frac{1}{4}$

$\frac{1}{3}$

$\frac{3}{10}$

$\frac{1}{2}$

(1)

(Total 2 marks)

Q23.

Circle the decimal which has the same value as $\frac{3}{5}$

0.06

0.35

0.6

3.5

(Total 1 mark)

Q24.

Circle the fraction equal to 0.12

$\frac{1}{12}$

$\frac{3}{25}$

$\frac{1}{8}$

$\frac{6}{5}$

(Total 1 mark)

Q25.

- (a) Write 0.85 as a fraction in its simplest form.

Answer _____

(2)

- (b) Write $\frac{5}{8}$ as a decimal.

Answer _____

(1)

(Total 3 marks)

Q26.

Circle the decimal that is closest in value to $\frac{11}{20}$

0.56

0.6

0.525

0.5

(Total 1 mark)

Q27.

What is $\frac{3}{2}$ as a decimal?

Circle your answer.

1.05

1.1

1.5

3.2

(Total 1 mark)

Q28.

The value of x can be 2 or 5

The value of y can be 3 or 12

- (a) List the possible values of xy

Answer _____

(2)

- (b) Work out the **least** possible value of $\frac{x-y}{x}$

You **must** show your working.

Answer _____

(2)

(Total 4 marks)