

N43N44N45 Converting FDP Non Calc

OCR

1 (a) Complete this table of fractions, decimals and percentages.

Fraction		Decimal		Percentage
	=	0.63	=	63%
	=	0.07	=	
$\frac{4}{5}$	=		=	

[3]

- 1 (a) Complete this table of fractions, decimals and percentages.

Fraction		Decimal		Percentage
$\frac{63}{100}$	=	0.63	=	63%
$\frac{7}{100}$	=	0.07	=	7%
$\frac{4}{5}$ $\frac{8}{10}$	=	0.8	=	80%

$$\frac{\quad}{10} \quad \frac{\quad}{100}$$

[3]

- 5 Write 0.26 as a fraction.
Give your answer in its simplest form.

..... [2]

- 5 Write 0.26 as a fraction.
Give your answer in its simplest form.

$$\frac{26}{100} = \frac{13}{50}$$

$$\frac{13}{50} \dots\dots\dots [2]$$

- 9 (a) Elsie changes $\frac{3}{8}$ to a decimal.

This is her working.

$$\frac{3}{8} \text{ is } \frac{1}{8} \text{ more than } \frac{1}{4}$$

.....

$$\frac{1}{4} \text{ is the same as } 0.14$$

.....

$$\frac{1}{8} \text{ is } \frac{1}{4} \times 2 = 0.28$$

.....

$$\text{so } \frac{3}{8} = 0.14 + 0.28 = 0.42$$

.....

Where a line of working is wrong, write the correct working beside it.

[3]

- 9 (a) Elsie changes $\frac{3}{8}$ to a decimal.

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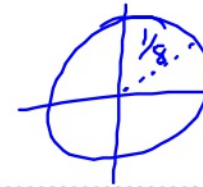
This is her working.

$$\frac{3}{8} \text{ is } \frac{1}{8} \text{ more than } \frac{1}{4} \quad \frac{2}{8}$$

$$\frac{1}{4} \text{ is the same as } 0.14$$

$$\frac{1}{8} \text{ is } \frac{1}{4} \times 2 = 0.28$$

$$\text{so } \frac{3}{8} = 0.14 + 0.28 = 0.42$$



✓

$$\times \quad \frac{1}{4} = 0.25$$

$$\times \quad \frac{1}{8} = \frac{1}{4} \div 2 = 0.125$$

$$\frac{3}{8} = 0.25 + 0.125 = 0.375$$

Where a line of working is wrong, write the correct working beside it.

[3]

6 Which is bigger, 36% or $\frac{7}{20}$?

N44 Show your working and give a reason for your answer.

..... is bigger because

..... [4]

6 Which is bigger, 36% or $\frac{7}{20}$?

N44 Show your working and give a reason for your answer.

$$36\% = 0.36$$

$$\frac{7}{20} \xrightarrow{\times 5} \frac{35}{100} = 0.35$$

36% is bigger because $0.36 > 0.35$

[4]

13 (a) Write $\frac{7}{9}$ as a recurring decimal.

(a) [1]

(b) Sally divided a two-digit number by another two-digit number.
Her answer was 3.181818.....

Find two numbers that Sally could have used.

(b) and [3]

13 (a) Write $\frac{7}{9}$ as a recurring decimal.

N45

$$\begin{array}{r}
 0.777 \\
 \hline
 9 \overline{) 7.000}
 \end{array}$$

$$0.\dot{7}$$

(a) [1]

(b) Sally divided a two-digit number by another two-digit number. Her answer was 3.181818.....

N56

Find two numbers that Sally could have used.

3

$$\begin{array}{r}
 0.181818 \\
 \hline
 \downarrow \\
 2/11
 \end{array}$$

$$\begin{array}{r}
 \text{Let } x = 0.\dot{18} \\
 10x = 1.8\dot{1} \\
 - 100x = 18.\dot{18} \\
 \hline
 99x = 18 \\
 x = 18/99 \\
 x = 2/11
 \end{array}$$

$$\begin{aligned}
 &= 3\frac{2}{11} \\
 &= \frac{35}{11} \checkmark
 \end{aligned}$$

(b) 35 and 11 [3]

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13 (a) Write $\frac{5}{12}$ as a recurring decimal.

(a) [2]

13 (a) Write $\frac{5}{12}$ as a recurring decimal.

$$\begin{array}{r} 0.41666 \\ \hline 12 \overline{) 5.00000} \\ \underline{48} \\ 20 \\ \underline{24} \\ 80 \\ \underline{84} \\ 40 \\ \underline{48} \\ 80 \\ \underline{84} \\ 40 \\ \underline{48} \\ 80 \\ \underline{84} \\ 40 \end{array}$$

(a) $0.41\overline{6}$ [2]

Edexcel

2 Write 27% as a fraction.

.....

(Total for Question 2 is 1 mark)

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2 Write 27% as a fraction.

$$\frac{27}{100}$$

(Total for Question 2 is 1 mark)

3 Write 0.09 as a fraction.

.....

(Total for Question 3 is 1 mark)

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3 Write 0.09 as a fraction.

$$\frac{9}{100}$$

(Total for Question 3 is 1 mark)

2 Write $\frac{3}{100}$ as a decimal.

N43

.....
(Total for Question 2 is 1 mark)

2 Write $\frac{3}{100}$ as a decimal.

N43

0.03

(Total for Question 2 is 1 mark)

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4 Write $\frac{4}{5}$ as a percentage.

.....%

(Total for Question 4 is 1 mark)

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4 Write $\frac{4}{5}$ as a percentage.

$\frac{4}{5}$ $\frac{40}{50}$ $\frac{80}{100}$

 x10 x2

 x10 x2

80 %

(Total for Question 4 is 1 mark)

14 Here are two fractions.

$$\frac{7}{5}$$

$$\frac{5}{7}$$

Work out which of the fractions is closer to 1
You must show all your working.

(Total for Question 14 is 3 marks)

14 Here are two fractions.

$$\frac{7}{5}$$

$$\frac{5}{7}$$

Work out which of the fractions is closer to 1
You must show all your working.

$$\frac{5}{7} = 7 \overline{) 5.00} \begin{array}{r} 0.73 \\ \underline{49} \\ 10 \\ \underline{7} \\ 3 \end{array}$$

$$\begin{aligned} \frac{7}{5} &= 1\frac{2}{5} \\ &= 1\frac{4}{10} \\ &= 1.4 \end{aligned}$$

$\frac{7}{5}$		$\frac{5}{7}$
$\frac{49}{35}$	\downarrow	$\frac{25}{35}$
\downarrow	$\frac{35}{35}$	
$\frac{14}{35}$ away		$\frac{10}{35}$ away ✓

0.73

$1 \rightarrow 0.73... \underline{\underline{0.27}}$

$\frac{5}{7}$ is closer

$$1 \rightarrow 1.4 = \underline{\underline{0.40}}$$

(Total for Question 14 is 3 marks)

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1 Write $\frac{7}{100}$ as a decimal.

.....
(Total for Question 1 is 1 mark)

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1 Write $\frac{7}{100}$ as a decimal.

0.07

(Total for Question 1 is 1 mark)

3 Write 20% as a fraction.

Nlx3

.....
(Total for Question 3 is 1 mark)

3 Write 20% as a fraction.

Nlx3

$$\frac{20}{100}$$

$$\frac{1}{5} \checkmark$$

$$\frac{20}{100} \checkmark$$

(Total for Question 3 is 1 mark)

14 Gavin, Harry and Isabel each earn the same monthly salary.

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Each month,

N43/44/45 Gavin **saves** 28% of his salary and spends the rest of his salary

R13 Harry spends $\frac{3}{4}$ of his salary and **saves** the rest of his salary

the amount of salary Isabel saves : the amount of salary she spends = 3 : 7

Work out who saves the most of their salary each month.

You must show how you get your answer.

(Total for Question 14 is 4 marks)

14 Gavin, Harry and Isabel each earn the same monthly salary. £100

Video created by W Neill

Each month,

N43/44/45 Gavin **saves** 28% of his salary and spends the rest of his salary

R13 Harry spends $\frac{3}{4}$ of his salary and **saves** the rest of his salary

the amount of salary Isabel saves : the amount of salary she spends = 3 : 7

Work out who saves the most of their salary each month.
You must show how you get your answer.

G	H	I
28%	$\frac{1}{4}$	$\frac{3}{10}$
28%	25%	30%

£100

Gavin Saves 28% = £28

Harry Saves $\frac{1}{4}$ = £25

Isabel Saves 3 : 7
 $\frac{3}{10}$ $\frac{7}{10}$ $\frac{3}{10}$ of £100 = £30 ✓

Isabel saves most.

(Total for Question 14 is 4 marks)

1 Write $\frac{9}{10}$ as a decimal.
N43

.....
(Total for Question 1 is 1 mark)

1 Write $\frac{9}{10}$ as a decimal.
N43

0.9

(Total for Question 1 is 1 mark)

2 Write 0.3 as a percentage.

N43

.....%

(Total for Question 2 is 1 mark)

2 Write 0.3 as a percentage.

N43

.....30.....%

(Total for Question 2 is 1 mark)

2 Write 0.6 as a percentage.

N43

..... %

(Total for Question 2 is 1 mark)

2 Write 0.6 as a percentage.

N43

60 %

(Total for Question 2 is 1 mark)

5 Write 0.31 as a fraction.

N43

.....
(Total for Question 5 is 1 mark)

5 Write 0.31 as a fraction.

N43

$$\frac{31}{100}$$

(Total for Question 5 is 1 mark)

2 Write 3% as a fraction.

N43

.....
(Total for Question 2 is 1 mark)

2 Write 3% as a fraction.

N43

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

(Total for Question 2 is 1 mark)

AQA

2

Work out $\frac{1}{4} + 0.5$

N44
N45

Circle your answer.

[1 mark]

0.30

0.6

0.75

0.9

2

Work out

0.25
 $\left(\frac{1}{4}\right) + 0.5$

Circle your answer.

N44
N45

[1 mark]

0.30

0.6

0.75

0.9

$$\frac{1}{4} + \frac{1}{2}$$

$$\begin{array}{r} 0.25 + 0.5 \\ + 0.50 \\ \hline 0.75 \end{array}$$

3

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

Circle your answer.

[1 mark]

1.05

1.1

1.5

3.2

N36
N43
N44

3

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

$$\frac{3}{2} = 1\frac{1}{2}$$

Circle your answer.

[1 mark]

1.05

1.1

1.5

3.2

N36
N43
N44

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

N44

[1 mark]

0.06

0.35

0.6

3.5

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

N44

[1 mark]

0.06

0.35

0.6

3.5

$$\frac{3}{5} = \frac{6}{10} = 0.6$$

10 Complete the table to show equivalent fractions and percentages.

N43-44-45

[3 marks]

Fraction	Percentage
$\frac{1}{2}$	50%
$\frac{3}{10}$	
	43%
$\frac{5}{2}$	

10 Complete the table to show equivalent fractions and percentages.

N43-44-45

[3 marks]

Fraction	Percentage
$\frac{1}{2}$	50%
$\frac{3}{10}$	30%
0.43	43%
$2\frac{1}{2}$ $\frac{5}{2}$	250%

$$1 = 100\%$$

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

[2 marks]

N43

Answer _____

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

[2 marks]

N43

$$\frac{85}{100} \div 5 = \frac{17}{20}$$

$$\frac{17}{20}$$

Answer

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

N45

[1 mark]

Answer _____

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

N45

$$\begin{array}{r} 0.625 \\ \hline 8 \overline{) 5.000} \\ \underline{40} \\ 60 \\ \underline{48} \\ 120 \\ \underline{120} \\ 0 \end{array}$$

[1 mark]

Answer

0.625 ✓

Video created by W Neill

19 Circle the percentage that is closest in value to $\frac{1}{3}$

[1 mark]

N45

30%

33%

33.3%

33.4%

19 Circle the percentage that is closest in value to $\frac{1}{3}$

$$= 0.\dot{3}$$

$$= 0.333333 \text{ [1 mark]}$$

$$= 33.\underline{3}333\%$$

30%

33%

33.3%

33.4%

N45