



KS2.M-Y4N5 Fractions and Decimal Equivalents

Calculators not allowed · about 40 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

1 Write $\frac{4}{10}$ as a decimal.

(1)

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

(1)

3 Write $\frac{3}{10}$ as an equivalent fraction out of 100.

(1)

4 Write $\frac{25}{100}$ in its simplest form.

(1)

5 Order the numbers below from smallest to largest: 0.3, $\frac{26}{100}$, $\frac{1}{4}$.

(1)

6 What is $\frac{6}{10}$ as a decimal?

(1)

7 Add these: $0.4 + 0.25$. Show the total as a decimal.

(2)

8 Calculate 0.75 minus $\frac{1}{4}$. Give the answer as a decimal.

(2)

9 Write 0.08 as a fraction in simplest form.

(1)

10 There are 100 squares in a grid. Sam colours 37 of them. What decimal shows the part Sam coloured?

(1)

11 Convert $\frac{45}{100}$ to a decimal.

(1)

12 Which is larger, 0.7 or $\frac{7}{10}$? Explain your answer in one sentence.

(2)

- 13** A recipe needs 0.25 kg of sugar and $\frac{75}{100}$ kg of flour. How many kilograms of ingredients are used in total? Give your answer as a decimal.

(2)

- 14** Fill in the missing number: $\frac{?}{100} = 0.09$

(1)

- 15** Zara says $\frac{2}{5}$ is equal to 0.4. Is she correct? Explain your answer in one sentence.

(2)

- 16** Write $\frac{3}{4}$ as a fraction out of 100.

(1)

- 17** A paint pot is 0.45 full of red paint and 0.30 full of blue paint. What fraction of the pot is red and blue together? Give your answer as a fraction in simplest form.

(2)

- 18** Explain why $\frac{50}{100}$ is equal to $\frac{1}{2}$. Give two different ways to show this.

(3)

Mark scheme · KS2.M-Y4N5 Fractions and Decimal Equivalents

Question 1

- **B1** 0.4 cao
- Answer: **0.4**

Question 2

- **B1** 0.07 cao
- Answer: **0.07**

Question 3

- **B1** 30/100 cao
- Answer: **30/100**

Question 4

- **B1** $\frac{1}{4}$ cao
- Answer: **$\frac{1}{4}$**

Question 5

- **B1** $\frac{1}{4}$, $\frac{26}{100}$, 0.3 cao
- Answer: **$\frac{1}{4}$, $\frac{26}{100}$, 0.3**

Question 6

- **B1** 0.6 cao
- Answer: **0.6**

Question 7

- **M1** Correct method: align hundredths or convert 0.4 to 0.40 or $\frac{4}{10}$ to $\frac{40}{100}$
- **A1** 0.65 cao
- Answer: **0.65**

Question 8

- **M1** Convert $\frac{1}{4}$ to 0.25 or $\frac{25}{100}$ and subtract from 0.75
- **A1** 0.50 cao
- Answer: **0.50**

Question 9

- **B1** $\frac{2}{25}$ cao
- Answer: **$\frac{2}{25}$**

Question 10

- **B1** 0.37 cao
- Answer: **0.37**

Question 11

- **B1** 0.45 cao
- Answer: **0.45**

Question 12

- **B1** States they are equal or gives one as equal to the other (e.g. they are the same)
- **B1** Gives correct reason, e.g. $\frac{7}{10} = 0.7$ or both are 0.7 cao
- Answer: **They are equal because $\frac{7}{10} = 0.7$**

Question 13

- **M1** Convert $75/100$ to 0.75 and add to 0.25
- **A1** 1.00 or 1.0 cao
- Answer: **1.00**

Question 14

- **B1** 9 cao
- Answer: **9**

Question 15

- **B1** States yes or no correctly (yes)
- **B1** Gives correct reason, e.g. $2/5 = 4/10 = 0.4$ cao
- Answer: **Yes. $2/5 = 4/10 = 0.4$**

Question 16

- **B1** $75/100$ cao
- Answer: **75/100**

Question 17

- **M1** Adds decimals $0.45 + 0.30 = 0.75$ or converts to hundredths and adds
- **A1** $3/4$ cao
- Answer: **3/4**

Question 18

- **M1** Shows division/simplifying method, e.g. divide numerator and denominator by 50 to get $1/2$
- **M1** Shows decimal or proportion method, e.g. $50/100 = 0.50$ and $1/2 = 0.5$
- **A1** Clear conclusion that both ways show $50/100 = 1/2$ cao
- Answer: **$50/100 = 1/2$ because dividing top and bottom by 50 gives $1/2$, and $50/100 = 0.50$ which equals $0.5 = 1/2$**