

Varied Fluency

Step 10: Decimals as Fractions 2

National Curriculum Objectives:

Mathematics Year 5: (5F6a) [Read and write decimal numbers as fractions \[for example, \$0.71 = 71/100\$ \]](#)

Mathematics Year 5: (5F6b) [Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents](#)

Differentiation:

Developing Questions to support converting fractions and decimals using numbers <1 that are multiples of 5 e.g. 0.35. Includes tenths and hundredths only.

Expected Questions to support converting fractions and decimals e.g. 0.07 and where a decimal may be >1 . Includes tenths and hundredths only with some expanded decimal and fraction forms including the use of 0 as a place holder.

Greater Depth Questions to support converting fractions and decimals e.g. 0.07 with decimals >1 . Includes tenths and hundredths only with expanded decimal and fraction forms including the use of 0 as a place holder.

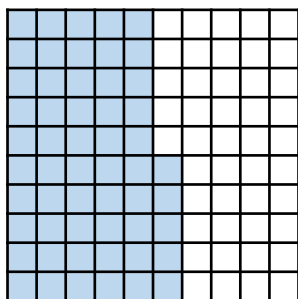
More [Year 4 and Year 5 Decimals](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Decimals as Fractions 2

Decimals as Fractions 2

1a. Circle the fraction that is represented by the image below.

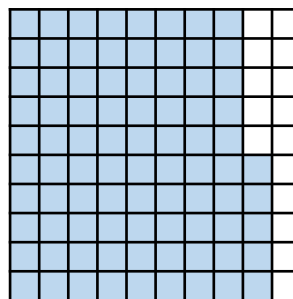


- A. $\frac{65}{100}$ B. $\frac{55}{10}$ C. $\frac{55}{100}$



5 VF

1b. Circle the fraction that is represented by the image below.

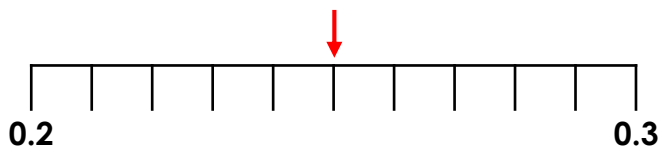


- A. $\frac{85}{10}$ B. $\frac{85}{100}$ C. $\frac{95}{100}$



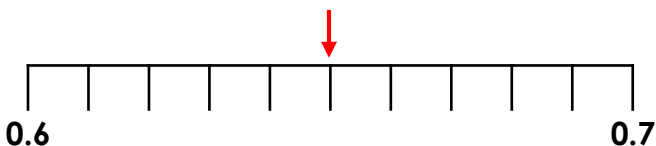
5 VF

2a. True or false? The arrow is pointing to $\frac{35}{100}$ on the number line.



5 VF

2b. True or false? The arrow is pointing to $\frac{65}{100}$ on the number line.



5 VF

3a. Match the decimal number to the equivalent fraction.

0.5

$\frac{75}{100}$

0.75

$\frac{35}{100}$

0.35

$\frac{5}{10}$



5 VF

3b. Match the decimal number to the equivalent fraction.

0.4

$\frac{55}{100}$

0.9

$\frac{4}{10}$

0.55

$\frac{9}{10}$



5 VF

4a. Convert these decimals to fractions and fractions to decimals.

A. 0.95

B. $\frac{15}{100}$

C. 0.3

D. $\frac{6}{10}$



5 VF

4b. Convert these decimals to fractions and fractions to decimals.

A. 0.45

B. $\frac{2}{10}$

C. 0.8

D. $\frac{25}{100}$

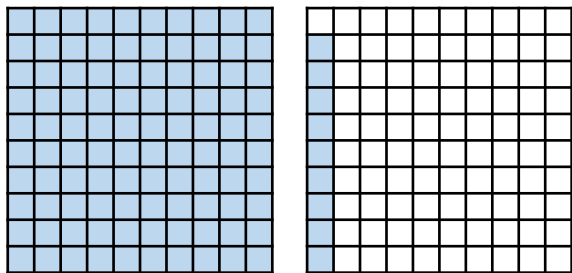


5 VF

Decimals as Fractions 2

Decimals as Fractions 2

5a. Circle the fraction that is represented by the image below.

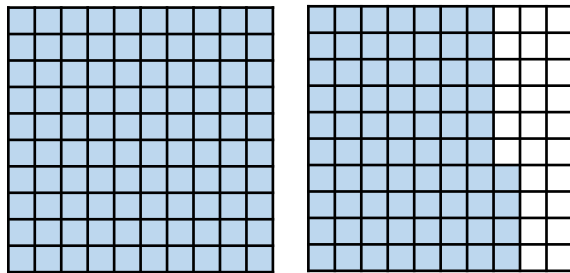


- A. $1 \frac{91}{100}$ B. $1 \frac{9}{100}$ C. $1 \frac{9}{10}$



5 VF

5b. Circle the fraction that is represented by the image below.

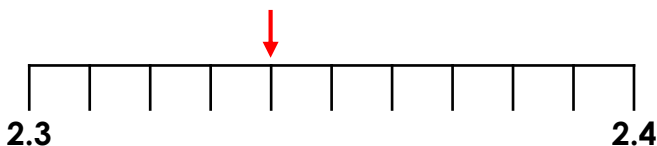


- A. $1 \frac{26}{100}$ B. $1 \frac{74}{10}$ C. $1 \frac{74}{100}$



5 VF

6a. True or false? The arrow is pointing to $2 \frac{34}{100}$ on the number line.



5 VF

6b. True or false? The arrow is pointing to $5 \frac{47}{100}$ on the number line.



5 VF

7a. Match the decimal number to the equivalent expanded fraction.

2.37

$$2 + \frac{7}{10} + \frac{3}{100}$$

2.73

$$3 + \frac{7}{10} + \frac{2}{100}$$

3.72

$$2 + \frac{3}{10} + \frac{7}{100}$$



5 VF

7b. Match the decimal number to the equivalent expanded fraction.

5.21

$$5 + \frac{1}{10} + \frac{2}{100}$$

5.15

$$5 + \frac{2}{10} + \frac{1}{100}$$

5.12

$$5 + \frac{1}{10} + \frac{5}{100}$$



5 VF

8a. Convert these decimals to expanded fractions and fractions to expanded decimals.

A. 4.36

B. $5 \frac{8}{100}$

C. 3.91

D. $7 \frac{6}{10}$



5 VF

8b. Convert these decimals to expanded fractions and fractions to expanded decimals.

A. 7.16

B. $3 \frac{6}{100}$

C. 2.98

D. $8 \frac{3}{10}$

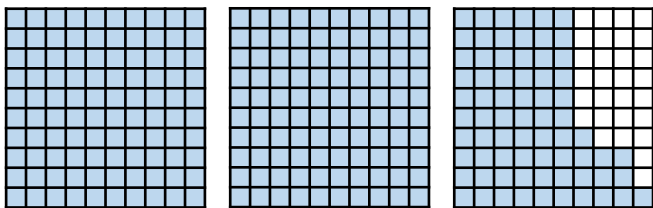


5 VF

Decimals as Fractions 2

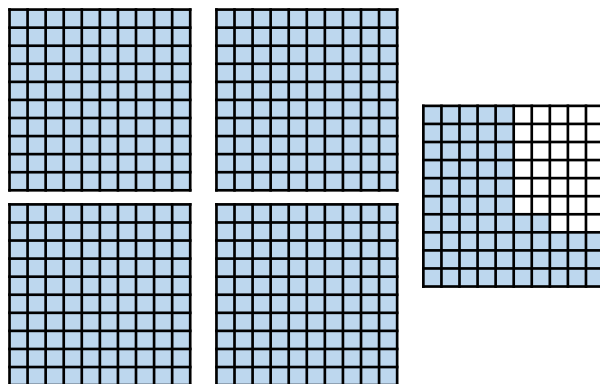
Decimals as Fractions 2

9a. Write the fraction that is represented by the image below.



5 VF

9b. Write the fraction that is represented by the image below.



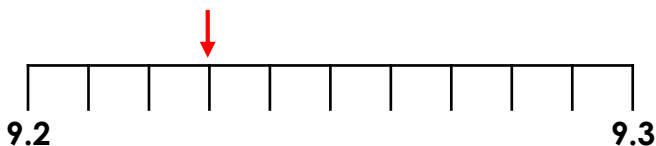
5 VF

10a. True or false? The arrow is pointing to $7 + \frac{1}{10} + \frac{70}{100}$ on the number line.



5 VF

10b. True or false? The arrow is pointing to $9 + \frac{2}{10} + \frac{3}{100}$ on the number line.



5 VF

11a. Match the expanded decimal number to the equivalent expanded fraction.

$$6 + 0.5 + 0.04$$

$$6 + \frac{4}{10} + \frac{4}{100}$$

$$6 + 0.4 + 0.05$$

$$6 + \frac{5}{10} + \frac{4}{100}$$

$$6 + 0.4 + 0.04$$

$$6 + \frac{4}{10} + \frac{5}{100}$$



5 VF

11b. Match the expanded decimal number to the equivalent expanded fraction.

$$9 + 0.3 + 0.09$$

$$9 + \frac{9}{10} + \frac{3}{100}$$

$$9 + 0.9 + 0.03$$

$$9 + \frac{6}{10} + \frac{9}{100}$$

$$9 + 0.6 + 0.09$$

$$9 + \frac{3}{10} + \frac{9}{100}$$



5 VF

12a. Convert these expanded decimals to expanded fractions and expanded fractions to expanded decimals.

A. $9 + 0.08$

B. $5 + \frac{7}{100}$

C. $7 + 0.4 + 0.06$

D. $5 + \frac{7}{10} + \frac{9}{100}$



5 VF

12b. Convert these expanded decimals to expanded fractions and expanded fractions to expanded decimals.

A. $3 + 0.7 + 0.05$

B. $4 + \frac{9}{10} + \frac{1}{100}$

C. $8 + 0.04$

D. $2 + \frac{1}{100}$



5 VF

Varied Fluency Decimals as Fractions 2

Developing

1a. C

2a. False. The arrow is pointing to $\frac{25}{100}$.

3a. $0.5 = \frac{5}{10}$, $0.75 = \frac{75}{100}$, $0.35 = \frac{35}{100}$

4a. $A = \frac{95}{100}$, $B = 0.15$, $C = \frac{3}{10}$, $D = 0.6$

Expected

5a. B

6a. True

7a. $2.37 = 2 + \frac{3}{10} + \frac{7}{100}$,

$2.73 = 2 + \frac{7}{10} + \frac{3}{100}$, $3.72 = 3 + \frac{7}{10} + \frac{2}{100}$

8a. $A = 4 + \frac{3}{10} + \frac{6}{100}$, $B = 5 + 0.08$

$C = 3 + \frac{9}{10} + \frac{1}{100}$, $B = 7 + 0.6$

Greater Depth

9a. $2 \frac{71}{100}$

10a. False. The arrow is pointing to

$7 + \frac{1}{10} + \frac{7}{100}$.

11a. $6 + 0.5 + 0.04 = 6 + \frac{5}{10} + \frac{4}{100}$,

$6 + 0.4 + 0.05 = 6 + \frac{4}{10} + \frac{5}{100}$,

$6 + 0.4 + 0.04 = 6 + \frac{4}{10} + \frac{4}{100}$

12a. $A = 9 + \frac{8}{100}$, $B = 5 + 0.07$,

$C = 7 + \frac{4}{10} + \frac{6}{100}$, $D = 5 + 0.7 + 0.09$

Varied Fluency Decimals as Fractions 2

Developing

1b. B

2b. True

3b. $0.4 = \frac{4}{10}$, $0.9 = \frac{9}{10}$, $0.55 = \frac{55}{100}$

4b. $A = \frac{45}{100}$, $B = 0.2$, $C = \frac{8}{10}$, $D = 0.25$

Expected

5b. C

6b. False. The arrow is pointing to $5 \frac{48}{100}$.

7b. $5.21 = 5 + \frac{2}{10} + \frac{1}{100}$,

$5.15 = 5 + \frac{1}{10} + \frac{5}{100}$, $5.12 = 5 + \frac{1}{10} + \frac{2}{100}$

8b. $A = 7 + \frac{1}{10} + \frac{6}{100}$, $B = 3 + 0.06$

$C = 2 + \frac{9}{10} + \frac{8}{100}$, $B = 8 + 0.3$

Greater Depth

9b. $3 \frac{67}{100}$

10b. True

11b. $9 + 0.3 + 0.09 = 9 + \frac{3}{10} + \frac{9}{100}$,

$9 + 0.9 + 0.03 = 9 + \frac{9}{10} + \frac{3}{100}$,

$9 + 0.6 + 0.09 = 9 + \frac{6}{10} + \frac{9}{100}$

12b. $A = 3 + \frac{7}{10} + \frac{5}{100}$, $B = 4 + 0.9 + 0.01$,

$C = 8 + \frac{4}{100}$, $D = 2 + 0.01$