Wednesday 15th April
Fractions to Decimals 2

Match each fraction to the correct equivalent decimal.

$\frac{54}{100}$ 0.45
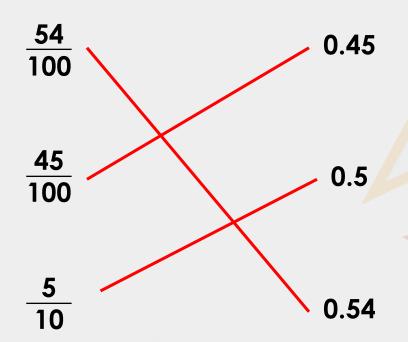
$\frac{45}{100}$ 0.5

$\frac{5}{10}$ 0.54

Y6

Match each fraction to the correct equivalent decimal.

$$\frac{54}{100}$$

$$\frac{45}{100}$$

$$\frac{5}{10}$$

0.45

0.5

0.54

Remember a fraction is a division sum so:

$$1/5 = 1 \text{ divided by } 5$$

Complete the calculation to convert the fraction below to a decimal.

$$\frac{1}{8}$$

$$8 \overline{\smash{)}\ 1 \cdot {}^{1}0 \ \ {}^{2}0 \ \ {}^{4}0}$$

Complete the calculation to convert the fraction below to a decimal.

$$\frac{1}{8}$$

$$0 \cdot 1 \quad 2 \quad 5$$

$$8 \overline{\smash{)}\ 1 \cdot {}^{1}0 \ {}^{2}0 \ {}^{4}0}$$

Y6

The top(numerator) divided by the bottom (denominator)

2/5 = 2 divided by 5

Use the bus stop method/then a calculator to check if you like.

Match the fraction to the correct decimal. Decimals are rounded to three decimal places where necessary.

$$\frac{8}{9}$$

A) 0.878

B) 0.889

C) 0.088

Y6

Match the fraction to the correct decimal. Decimals are rounded to three decimal places where necessary.

$$\frac{8}{9}$$

A) 0.878

B) 0.889

C) 0.088

Y6

True or false?

$\frac{5}{7}$ is equivalent to 0.704 when written to three decimal places.

Y6

True or false?

$\frac{5}{7}$ is equivalent to 0.704 when written to three decimal places.

False. The answer is 0.714.

Write the following fractions as decimals. Round to three decimal places where necessary.

$$\frac{3}{7} \qquad \frac{2}{9} \qquad \frac{1}{7}$$

Y6

Write the following fractions as decimals. Round to three decimal places where necessary.

$$\frac{3}{7} \qquad \frac{2}{9} \qquad \frac{1}{7}$$

0.429   **0.222**   **0.143**

Y6

Before you can compare turn them both to the same format.

Convert them all to decimals or fractions if you wish.

You have been doing decimals so you would find this easier.

Use >, < or = to compare the fractions and decimals below.

A) $\dfrac{3}{9}$ ☐   0.444

B) $\dfrac{1}{6}$ ☐   0.159

Y6

Use >, < or = to compare the fractions and decimals below.

A) $\dfrac{3}{9}$ **<**   **0.444**

B) $\dfrac{1}{6}$ **>**   **0.159**

Convert the fractions to decimals. Round decimals to three decimal places where necessary.

A) $\dfrac{2}{7}$ B) 0.199   C) $\dfrac{4}{6}$ D) 0.566

Now order them from smallest to largest.

Rounding decimals

Rounding to 1dp

2.34567 = 2.3 the 4 does not make you round up.

Rounding to 2dp

2.34567 = 2.35 the following 5 made you round up

Rounding to 3dp

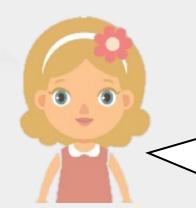2.34567 = 2.346 the following 6 make you round the previous 5 up

Convert the fractions to decimals. Round decimals to three decimal places where necessary.

A) $\dfrac{2}{7}$ B) 0.199   C) $\dfrac{4}{6}$ D) 0.566

Now order them from smallest to largest.

B) 0.199   A) 0.286   D) 0.566   C) 0.667

Y6

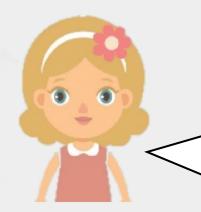Holly converts a fraction to a decimal and rounds it to three decimal places. She says,

I think that $\dfrac{5}{6}$ is equivalent to 0.834.

Is she correct?
Convince me.

Holly converts a fraction to a decimal and rounds it to three decimal places. She says,

> I think that $\frac{5}{6}$ is equivalent to 0.834.

Is she correct?
Convince me.

Holly is incorrect because…

Y6

Holly converts a fraction to a decimal and rounds it to three decimal places. She says,
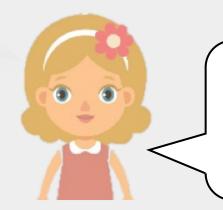
I think that $\frac{5}{6}$ is equivalent to 0.834.

Is she correct?
Convince me.

Holly is incorrect because $\frac{5}{6}$ is equivalent to 0.833 when rounded to 3 decimal places.

Developing

1a. Complete the calculation to convert the fraction below to a decimal.	1b. Complete the calculation to convert the fraction below to a decimal.
$\frac{4}{5}$ $5\overline{)4 \cdot {}^{4}0}$	$\frac{3}{5}$ $5\overline{)3 \cdot {}^{3}0}$
☆ D 6 VF	☆ D 6 VF
2a. Match the fraction to the correct decimal.	2b. Match the fraction to the correct decimal.
$\frac{2}{5}$ A) 0.2 B) 0.5 C) 0.4	$\frac{3}{6}$ A) 0.5 B) 0.18 C) 0.9

2a. Convert the fractions to decimals.

A) $\frac{3}{5}$ B) 0.5   C) $\frac{4}{10}$ D) 0.8

Now order them from smallest to largest.

2b. Convert the fractions to decimals.

A) $\frac{6}{10}$ B) 0.9   C) $\frac{1}{5}$ D) 0.7

Now order them from largest to smallest.

3a. Susie is converting a fraction to a decimal. Her working out is shown below.

I think that $\frac{6}{8}$ is equivalent to 0.76

$$0 \cdot 7 \quad 6$$
$$8 \overline{\smash{)}6 \cdot {}^{6}0 \quad {}^{4}0}$$

Is she correct? Convince me.

3b. Ant is converting a fraction to a decimal. His working out is shown below.

I think that $\frac{2}{8}$ is equivalent to 0.15.

$$0 \quad 1 \quad 5$$
$$8 \overline{\smash{)}2 \cdot {}^{2}0 \quad {}^{4}0}$$

Is he correct? Convince me.

Expected

5a. Complete the calculation to convert the fraction below to a decimal.	5b. Complete the calculation to convert the fraction below to a decimal.
$\dfrac{5}{8}$ 8 ⟌ 5 . ^{5}0 ^{2}0 ^{4}0	$\dfrac{7}{8}$ 8 ⟌ 7 . ^{7}0 ^{6}0 ^{4}0
☆ E 6 VF	☆ E 6 VF
6a. Match the fraction to the correct decimal. Decimals have been written to three decimal places. $\dfrac{4}{7}$ A) 0.621 B) 0.571 C) 0.581	6b. Match the fraction to the correct decimal. Decimals have been written to three decimal places. $\dfrac{5}{6}$ A) 0.853 B) 0.844 C) 0.833

5a. Convert the fractions to decimals. Round to three decimal places where necessary.

A) $\frac{5}{9}$ B) 0.774   C) $\frac{1}{6}$ D) 0.596

Now order them from smallest to largest.

5b. Convert the fractions to decimals. Round to three decimal places where necessary.

A) $\frac{1}{9}$ B) 0.344   C) $\frac{3}{9}$ D) 0.291

Now order them from largest to smallest.

6a. Jasmine converts a fraction to a decimal and rounds it to three decimal places. She says,

I think that $\frac{2}{7}$ is equivalent to 0.275

Is she correct?
Convince me.

6b. Archer converts a fraction to a decimal and rounds it to three decimal places. He says,

I think that $\frac{1}{7}$ is equivalent to 0.143

Is he correct?
Convince me.

Greater Depth

9a. Complete the calculation to convert the fraction below to a decimal.

$1\frac{2}{8}$

$8 \overline{\smash{)}1 \quad {}^{1}0 \bullet {}^{2}0 \quad {}^{4}0}$

6 VF

9b. Complete the calculation to convert the fraction below to a decimal.

$1\frac{6}{8}$

$8 \overline{\smash{)}1 \quad {}^{1}4 \bullet {}^{6}0 \quad {}^{4}0}$

6 VF

10a. Match the fraction to the correct decimal. Decimals have been written to three decimal places.

$1\frac{5}{6}$

A) 1.844

B) 1.834

C) 1.833

10b. Match the fraction to the correct decimal. Decimals have been written to three decimal places.

$1\frac{4}{9}$

A) 1.444

B) 0.444

C) 1.433

8a. Convert the fractions to decimals. Round to three decimal places where necessary.

A) $2\frac{3}{5}$ B) 2.69   C) $2\frac{2}{8}$ D) 2.05

Now order them from smallest to largest.

8b. Convert the fractions to decimals. Round to three decimal places where necessary.

A) $3\frac{2}{9}$ B) 3.133   C) $3\frac{4}{6}$ D) 3.776

Now order them from largest to smallest.

9a. Scarlett converts a fraction to a decimal and rounds it to three decimal places. She says,

> I think that $2\frac{5}{9}$ is equivalent to 2.556.

Is she correct?
Convince me.

9b. Leon converts a fraction to a decimal and rounds it to three decimal places. He says,

> I think that $3\frac{1}{6}$ is equivalent to 0.116.

Is he correct?
Convince me.