

Decimals – Halves and Quarters

Alex says:

If I know $\frac{1}{2}$ is 0.5 as a decimal, I also know $\frac{3}{6}$, $\frac{4}{8}$ and $\frac{6}{12}$ are equivalent to 0.5 as a decimal.

Explain Alex's thinking.

Dexter has made a mistake when converting his fractions to decimals.

$$\frac{1}{2} = 1.2, \frac{1}{4} = 1.4 \text{ and } \frac{3}{4} = 3.4$$

What mistake has Dexter made?

Alex says:

If I know $\frac{1}{2}$ is 0.5 as a decimal, I also know $\frac{3}{6}$, $\frac{4}{8}$ and $\frac{6}{12}$ are equivalent to 0.5 as a decimal.

Explain Alex's thinking.

Alex has used her knowledge of equivalent fractions to find other fractions that are equivalent to 0.5

Dexter has made a mistake when converting his fractions to decimals.

$$\frac{1}{2} = 1.2, \frac{1}{4} = 1.4 \text{ and } \frac{3}{4} = 3.4$$

What mistake has Dexter made?

Dexter has incorrectly placed the numerator in the ones column and the denominator in the tenths column. He should have used equivalent fractions with tenths and or hundredths to convert the fractions to decimals.