

Activity 12 Assessment

Converting Between Fractions and Decimals

Converting Between Fractions and Decimals

Writes a terminating decimal as a fraction

$$0.62 = \frac{62}{100}$$

Writes a fraction as a terminating decimal

Writes a fraction with denominator of a power of 10:

$$\frac{7}{8} = \frac{875}{1000} = 0.875$$

or divides numerator by denominator:

$$\frac{7}{8} = 7 \div 8 = 0.875$$

Writes a fraction as a repeating decimal

Extend a known pattern:

$$\frac{5}{9} = 0.555\dots \text{ because } \frac{1}{9} = 0.111\dots$$

$$\text{and } \frac{2}{9} = 0.222\dots$$

or divides numerator by denominator:

$$\frac{5}{9} = 5 \div 9 = 0.555\dots$$

Uses a pattern to write a repeating decimal as a fraction

$$0.\overline{09} = \frac{1}{11} \text{ and } 9 \times 1 = 9$$

$$0.\overline{18} = \frac{2}{11} \text{ and } 9 \times 2 = 18$$

$$0.\overline{27} = \frac{3}{11} \text{ and } 9 \times 3 = 27$$

I know that $9 \times 7 = 63$,

$$\text{so } 0.\overline{63} = \frac{7}{11}$$

Observations/Documentation