

**Lesson Summary**

Any terminating decimal can be converted to a fraction using place value (e.g., 0.35 is thirty-five hundredths or  $\frac{35}{100}$ ). A fraction whose denominator includes only factors of 2 and 5 can be converted to a decimal by writing the denominator as a power of ten.

**Problem Set**

- Convert each terminating decimal to a fraction in its simplest form.
  - 0.4
  - 0.16
  - 0.625
  - 0.08
  - 0.012
- Convert each fraction or mixed number to a decimal using an equivalent fraction.
  - $\frac{4}{5}$
  - $\frac{3}{40}$
  - $\frac{8}{200}$
  - $3\frac{5}{16}$
- Tanja is converting a fraction into a decimal by finding an equivalent fraction that has a power of 10 in the denominator. Sara looks at the last step in Tanja's work (shown below) and says that she cannot go any further. Is Sara correct? If she is, explain why. If Sara is incorrect, complete the remaining steps.

$$\frac{72}{480} = \frac{2^3 \cdot 3^2}{2^5 \cdot 3 \cdot 5}$$