REVIEW: Fractions and Decimals

Name

Key Concept and Vocabulary -

$$\frac{1}{10} = 0.1 \qquad \frac{1}{5} = 0.2 \qquad \frac{2}{5} = 0.4$$

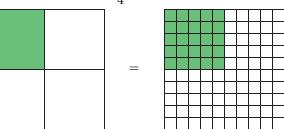
$$\frac{1}{4} = 0.25$$
 $\frac{1}{2} = 0.5$ $\frac{3}{4} = 0.75$

$$\frac{1}{8} = 0.125$$
 $\frac{3}{8} = 0.375$ $\frac{5}{8} = 0.625$



Visual Model

$$\frac{1}{4} = 0.25$$



Skill Examples

1.
$$0.6 = \frac{6}{10} = \frac{3}{5}$$

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$$0.6 = \frac{6}{10} = \frac{3}{5}$$
 2. $\frac{4}{5} = \frac{4 \cdot 2}{5 \cdot 2} = \frac{8}{10} = 0.8$

3.
$$0.875 = \frac{875}{1000} = \frac{7 \cdot 125}{8 \cdot 125} = \frac{7}{8}$$

4.
$$\frac{1}{3} = 0.333... = 0.\overline{3}$$
 $0.3333...$ $3\overline{1.0000...}$

Application Example

5. You put 16.75 gallons of gas in your car. Write this decimal as a mixed number.

$$16.75 = 16 + 0.75 = 16\frac{3}{4}$$

You put $16\frac{3}{4}$ gallons of gas in your car.

PRACTICE MAKES PURR-FECT

Check your answers at BigIdeasMath.com. —

Write the fraction as a decimal.

6.
$$\frac{3}{4} = \underline{0.75}$$

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 7. $\frac{7}{10} = \underline{0.7}$

8.
$$\frac{3}{25} = 0.12$$

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$$\frac{3}{25} = \underline{0.12}$$
 9. $\frac{7}{20} = \underline{0.35}$

10.
$$\frac{19}{100} = \underline{0.19}$$
 11. $\frac{11}{50} = \underline{0.22}$

11.
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12.
$$\frac{2}{3} = 0.\overline{6}$$

12.
$$\frac{2}{3} = \underline{0.\overline{6}}$$
 13. $\frac{1}{6} = \underline{0.1\overline{6}}$

Write the decimal as a fraction.

14.
$$0.4 = \frac{\frac{2}{5}}{}$$

15.
$$0.35 = \frac{7}{20}$$

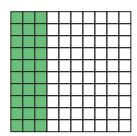
16.
$$0.6 = \frac{3}{5}$$

Write the decimal as a fraction.

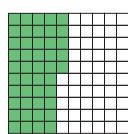
14.
$$0.4 = \underline{\frac{2}{5}}$$
15. $0.35 = \underline{\frac{7}{20}}$
16. $0.6 = \underline{\frac{3}{5}}$
17. $1.5 = \underline{\frac{3}{2}}$

Write the number represented by the model as a decimal and as a simplified fraction.

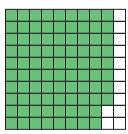
18.
$$0.3 = 10$$



19.
$$0.45 = 20$$



20.
$$0.88 = \frac{22}{25}$$



- **21. GAS** You put 9.25 gallons of gas in your car. Write this decimal as a mixed number.
- 22. MULTIPLE FORMS Write the decimal 0.35 in two ways. One with a denominator of 100 and one with a denominator of 1000. 100' 1000