

## Guided Practice

Write each fraction or mixed number as a decimal. (Example 1)

1.  $\frac{2}{5}$  \_\_\_\_\_

2.  $\frac{8}{9}$  \_\_\_\_\_

3.  $3\frac{3}{4}$  \_\_\_\_\_

4.  $\frac{7}{10}$  \_\_\_\_\_

5.  $2\frac{3}{8}$  \_\_\_\_\_

6.  $\frac{5}{6}$  \_\_\_\_\_

Write each decimal as a fraction or mixed number in simplest form. (Example 2)

7. 0.675 \_\_\_\_\_

8. 5.6 \_\_\_\_\_

9. 0.44 \_\_\_\_\_

10.  $0.\overline{4}$

$$10x = \boxed{\phantom{00}}$$

$$-x \quad - \quad \boxed{\phantom{00}}$$

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$$\boxed{\phantom{00}}x = \boxed{\phantom{00}}$$

$x =$  \_\_\_\_\_

11.  $0.\overline{26}$

$$100x = \boxed{\phantom{00}}$$

$$-x \quad - \quad \boxed{\phantom{00}}$$

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$$\boxed{\phantom{00}}x = \boxed{\phantom{00}}$$

$x =$  \_\_\_\_\_

12.  $0.\overline{325}$

$$1000x = \boxed{\phantom{00}}$$

$$-x \quad - \quad \boxed{\phantom{00}}$$

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$$\boxed{\phantom{00}}x = \boxed{\phantom{00}}$$

$x =$  \_\_\_\_\_

Solve each equation for  $x$ . (Example 3)

13.  $x^2 = 144$

$$x = \pm \sqrt{\boxed{\phantom{00}}} = \pm \boxed{\phantom{00}}$$

14.  $x^2 = \frac{25}{289}$

$$x = \pm \sqrt{\frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}} = \pm \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

15.  $x^3 = 216$

$$x = \sqrt[3]{\boxed{\phantom{00}}} = \boxed{\phantom{00}}$$

Approximate each irrational number to two decimal places without a calculator.

(Explore Activity)

16.  $\sqrt{5} \approx \boxed{\phantom{00}}$

17.  $\sqrt{3} \approx \boxed{\phantom{00}}$

18.  $\sqrt{10} \approx \boxed{\phantom{00}}$



### ESSENTIAL QUESTION CHECK-IN

19. What is the difference between rational and irrational numbers?

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