GUIDED PRACTICE

1. Vocabulary How do you find the *reciprocal* of $\frac{1}{2}$? **SEE EXAMPLE 1** Find the value of each expression.

p. 20 **2.**
$$-72 \div (-9)$$

4.
$$-7.2 \div x$$
 for $x = 3.6$

SEE EXAMPLE 2

5.
$$5 \div \frac{5}{7}$$

6.
$$\frac{4}{5} \div \left(-\frac{8}{5}\right)$$

5.
$$5 \div \frac{5}{7}$$
 6. $\frac{4}{5} \div \left(-\frac{8}{5}\right)$ **7.** $\frac{2}{3} \div \left(-\frac{1}{3}\right)$ **8.** $\frac{16}{25} \div \frac{4}{5}$

8.
$$\frac{16}{25} \div \frac{4}{5}$$

SEE EXAMPLE 3 Multiply or divide if possible.

11.
$$0 \div \frac{2}{3}$$

11.
$$0 \div \frac{2}{3}$$
 12. $\frac{7}{8} \div 0$

Independent Practice

See

Example

1

2

3

For

Exercises

14-16

17-20

21-24

25

13. Entertainment It is estimated that 7 million people saw off-Broadway shows in 2002. Assume that the average price of a ticket was \$30. How much money was spent on tickets for off-Broadway shows in 2002?

PRACTICE AND PROBLEM SOLVING

Find the value of each expression.

14.
$$-30 \div (-6)$$

16.
$$x(-12)$$
 for $x = -25$

Divide.

17.
$$\frac{3}{20} \div \left(-\frac{1}{4}\right)$$

18.
$$\frac{9}{14} \div \frac{15}{28}$$

19.
$$4\frac{1}{2} \div 1\frac{1}{2}$$

17.
$$\frac{3}{20} \div \left(-\frac{1}{4}\right)$$
 18. $\frac{9}{14} \div \frac{15}{28}$ **19.** $4\frac{1}{2} \div 1\frac{1}{2}$ **20.** $2\frac{3}{4} \div \left(-1\frac{1}{2}\right)$

Extra Practice

Skills Practice p. S4 Application Practice p. S28 Multiply or divide if possible.

22.
$$-0.25 \div 0$$

24.
$$\frac{0}{1} \div 3$$

25. Weather A cold front changes the temperature by -3° F each day. If the temperature started at 0°F, what will the temperature be after 5 days?

Multiply or divide.

26.
$$21 \div (-3)$$

27.
$$-100 \div 25$$

27.
$$-100 \div 25$$
 28. $-6 \div (-14)$ **29.** $-6.2(10)$

29.
$$-6.2(10)$$

30.
$$\frac{1}{2} \div \frac{1}{2}$$

31.
$$-3.75(-5)$$

30.
$$\frac{1}{2} \div \frac{1}{2}$$
 31. $-3.75(-5)$ **32.** $-12\frac{1}{2}(-3)$ **33.** $17(\frac{1}{17})$

33.
$$17\left(\frac{1}{17}\right)$$

34. Critical Thinking What positive number is the same as its reciprocal?

Evaluate each expression for a = 4, b = -3, and c = -2.

36.
$$a \div c$$

38.
$$c \div a$$

Let p represent a positive number, n represent a negative number, and z represent zero. Tell whether each expression is positive, negative, zero, or undefined.

41.
$$\frac{n}{k}$$

43.
$$-\frac{p}{n}$$

43.
$$-\frac{p}{n}$$
 44. $-(pn)$

45.
$$\frac{pn}{z}$$

46.
$$\frac{z}{n}$$

23