

Solve for x.

16.)  $4x = 32$

$x = 8$

17.)  $7x = 63$

$x = 9$

18.)  $5x = 35$

$x = 7$

19.) Hayes has 5 more than twice as many cookies as his friend Kellen. Write an algebraic expression showing the number of cookies Hayes has if x represents the number of cookies Kellen has.

$2x + 5$

20.) What is the greatest common factor of 24, 60, and 84?

GCF =  $12$

21.) What is the least common multiple of 16 and 24?

LCM =  $48$

22.) What is the least common denominator of  $\frac{1}{8}$  and  $\frac{5}{6}$ ?

$24$

23.) Brooklyn has  $\frac{2}{3}$  hour left to make Christmas cards for her class party. It takes her  $\frac{1}{6}$  of an hour to make each card. How many cards can she make in the remaining time?

$\frac{2}{3} \div \frac{1}{6} = \frac{2}{3} \times \frac{6}{1} = \frac{12}{3} = 4$  cards

24.) Tanner bought  $12\frac{1}{2}$  pounds of ground beef for the cookout. He plans on using  $\frac{1}{4}$  pound for each hamburger. How many burgers can he make?

$12\frac{1}{2} \div \frac{1}{4} = \frac{25}{2} \times \frac{4}{1} = \frac{100}{2} = 50$

25.) One piece of cheese provides  $\frac{1}{10}$  of the daily protein requirement, and one cup of milk provides  $\frac{1}{5}$  of the daily protein needs. If Oscar ate 2 pieces of cheese and drank 2 cups of milk, how much of the daily protein needs would he meet?

$2 \cdot \frac{1}{10} + 2 \cdot \frac{1}{5} = \frac{2}{10} + \frac{2}{5} = \frac{2}{10} + \frac{4}{10} = \frac{6}{10} = \frac{3}{5}$

$\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$

Write the integer that represents each situation.

26.) 45 degrees below zero

$-45^\circ$

27.) a deposit of \$17

$\$17$

28.) 400 feet below sea level

$-400\text{ft}$

State whether each inequality is true or false.

29.)  $8 > 9$  false

30.)  $-5 < -4$  true

31.)  $0 < -\frac{1}{2}$  false

32.)  $|-13| > |-14|$

false

33.)  $|-7| > |-6|$

true

34.)  $|-2| < 0$

false