

Name \_\_\_\_\_

**Write Expressions**

Write an algebraic expression for the word expression.

1. 47 less than the product of
- $y$
- and 7

$$y7 - 47$$

- 2.
- $\frac{3}{4}$
- added to 8 times
- $w$

$$8w + \frac{3}{4}$$

- 3.
- $q$
- times 11 take away the product of 6 and
- $t$

$$11q - (6t)$$

4. the difference between
- $a$
- and 4 divided by the sum of
- $b$
- and 9

$$\frac{a-4}{(b+9)}$$

5. the product of
- $m$
- and 15 divided by the sum of
- $n$
- and 50

$$\frac{m15}{(n+50)}$$

- 6.
- $k$
- times 12 divided by the product of
- $d$
- and 3

$$\frac{k12}{(d3)}$$

Write a word expression for each.

- 7.
- $15 - (r + s)$

15 less than the  
sum of  $r$  and  $s$ 

- 8.
- $\frac{g+5}{t}$

of added to 5 divided  
by  $t$ 

- 9.
- $k \times m + 1.5$

 $k$  times  $m$  plus  
1.5

- 10.
- $\frac{20}{bc}$

20 divided by  $b$   
times  $c$ 

- 11.
- $7.5n + xy$

7.5 times  $n$  added  
to  $x$  times  $y$ 

- 12.
- $de - \frac{1}{2}$

subtract  $\frac{1}{2}$  from  
the product of  $d$  and  $e$ **Mixed Review**

Find the quotient. Write the answer in simplest form.

13.  $\frac{2}{3} \div \frac{1}{4}$

$$\frac{2}{3} \times \frac{4}{1} = \frac{8}{3} = 2\frac{2}{3}$$

14.  $\frac{4}{5} \div \frac{2}{15}$

15.  $9 \div \frac{3}{8}$

16.  $\frac{3}{7} \div \frac{2}{5}$

Find the difference.

17.  $7 - ^{-}10$

$$7 + 10 = 17$$

18.  $^{-}6 - 5$

19.  $^{-}12 - ^{-}3$

20.  $14 - ^{-}18$

**Evaluate Expressions**Evaluate the expression for  $x = -5, -1, 0,$  and  $3$ .

$4 \cdot -5 - 2 =$

$4 \cdot -1 - 2 =$

$4 \cdot 0 - 2 =$

$4 \cdot 3 - 2 =$

1.  $4x - 2$

2.  $13 - 2x$

3.  $-7 + 5x$

4.  $\frac{3}{4} - 3x$

5.  $6 + 10(x - 3)$

6.  $\frac{12}{x-1} - 8$

7.  $25 - x^2$

8.  $6x \div -3$

9.  $-4 \times (x + 5)$

Simplify the expression.

Then evaluate the expression for the given value of the variable.

10.  $4x - x + 21$  for  $x = 5$

11.  $k - 7k - 11$  for  $k = -3$

12.  $6a + 3b + 27 - 2a$   
for  $a = -7$  and  $b = 6$

13.  $m + 30 - 2n + 4m$   
for  $m = -6$  and  $n = 15$

Evaluate the expression for the given value of the variables

14.  $4f \times (g - h)$   
for  $f = -2, g = -10,$  and  $h = 12$

15.  $r \times (6s + 2t)$   
for  $r = 4, s = 5,$  and  $t = -9$

**Mixed Review**Compare. Write  $<$  or  $>$ .

16.  $-1.50$  \_\_\_\_\_  $-1.55$

17.  $-\frac{2}{3}$  \_\_\_\_\_  $\frac{1}{3}$

18.  $.80$  \_\_\_\_\_  $\frac{3}{4}$

19.  $-\frac{2}{7}$  \_\_\_\_\_  $-\frac{5}{6}$

Find the product.

20.  $-20 \times 6$

21.  $-12 \times 8$

22.  $7 \times -11$

23.  $-15 \times 15$

24.  $-7 \times -40$

25.  $-35 \times 0$

26.  $9 \times -12$

27.  $-10 \times -11$

## Connect Words and Equations

Write an equation for the word sentence.

1. 12 less than a number equals 15.

$$12 - n = 15$$

2. The quotient of a number and 7 is 63.

$$7 \times n = 63$$

3. 5 more than a number is 31.

5. 3 times the price  $p$  equals \$9.45

6. 4 times the number of cars is 84.

7. A number  $x$  divided by 2.5 is 3.5.

$$\frac{x}{2.5} = 3.5$$

8. 12 fewer than a number  $m$  is  $17\frac{1}{2}$

9. 5 times the number of students in the class is 155.

10. The number of auditorium seats divided by 3 is 174.

11. Eight more than your test score is 100.

12. The difference between a number  $k$  and  $-7$  is 12.

## Mixed Review

Rewrite the problem so that the divisor is a whole number.

13.  $9.2 \div 5.4$

14.  $7.3 \div 2.6$

15.  $19.12 \div 3.4$

16.  $67.3 \div 0.18$

Write the fraction in simplest form.

17.  $\frac{7}{21}$

18.  $\frac{16}{30}$

19.  $\frac{9}{24}$

20.  $\frac{15}{50}$

21.  $\frac{20}{45}$

22.  $\frac{12}{18}$

23.  $\frac{10}{15}$

24.  $\frac{24}{36}$

25.  $\frac{33}{55}$

26.  $\frac{16}{24}$



Name \_\_\_\_\_

### Solve Addition Equations

Solve and check. Name the property.

1.  $x + 9 = 14$

$$\begin{array}{r} x + 9 = 14 \\ -9 \quad -9 \\ \hline x = 5 \end{array}$$

2.  $m + 3.5 = 9$

$$\begin{array}{r} m + 3.5 = 9 \\ -3.5 \quad -3.5 \\ \hline m = 5.5 \end{array}$$

3.  $12 + w = 23$

4.  $t + 8.7 = 16.3$

5.  $b + 4\frac{1}{3} = 11$

6.  $15 = e + 11.2$

7.  $n + 6\frac{3}{5} = 9$

8.  $18.9 + c = 31.2$

9.  $24.6 = 15.7 + h$

10.  $14\frac{1}{2} + d = 22$

11.  $5\frac{1}{4} = 2\frac{1}{2} + z$

12.  $k + 17.8 = 42.1$

13.  $9.3 = 5.9 + q$

14.  $51 = 29.8 + p$

15.  $j + 4 = -7$

16.  $8.6 + s = 14.3$

17.  $-3 = y + 6$

18.  $17\frac{3}{5} = a + 8\frac{1}{2}$

### Mixed Review

Estimate.

19.  $67.9 - 39.6$

20.  $109.4 \div 22$

21.  $\$7.78 + \$6.19$

22.  $1.9 \times 15.1$

23.  $3 \times \$51.99$

24.  $202.1 - 58.3$

25.  $6.71 + 19.03$

26.  $599.2 \div 3.9$

Write the percent or decimal.

27. 16% \_\_\_\_\_

28. 7% \_\_\_\_\_

29. 0.65 \_\_\_\_\_

30. 19% \_\_\_\_\_

31. 0.54 \_\_\_\_\_

32. 0.02 \_\_\_\_\_

33. 10% \_\_\_\_\_

34. 0.42 \_\_\_\_\_

35. 90% \_\_\_\_\_

36. 0.09 \_\_\_\_\_