

# Assignment

## Write

Explain the difference between an algebraic expression and a linear expression.

## Remember

To evaluate an algebraic expression, replace each variable in the expression with a number or numeric expression and then perform all possible mathematical operations.

## Practice

Evaluate each algebraic expression.

- $64 - 9p$  for  $p = 4, 9, -3$
- $-w + 8.5$  for  $w = 12, -1.5, 5.3$
- $46 + (-2k)$  for  $k = 3, 23, -2$

Complete each table.

4.

$b$	$3b + 14$
-5	
-3	
0	
4	

5.

$v$	1	2	5	-3.25
$6.75 - 6v$				

6.

$f$	4	8	-12	-1
$\frac{f}{4} + 3f$				

Evaluate each algebraic expression for the given quantity.

7.  $-6.2x + 1.4x$ ,  $x = -9.3$

8.  $3\frac{1}{2}x - 5\frac{1}{3}x$ ,  $x = \frac{2}{5}$

## Stretch

Evaluate each algebraic expression for the given quantity.

1.  $-3(2.1x - 7.9)$  for  $x = -18.1, -0.3, 14.4$

2.  $-9.8t^2 + 20t + 8$  for  $t = -2, 0, 3.5$

## Review

Rewrite each numeric expression by factoring out  $(-1)$ .

1.  $-7 + 5$

2.  $3 + 8$

Determine each quotient.

3.  $-8.9 \div -0.1$

4.  $-4\frac{1}{3} \div \frac{2}{5}$

Write two unit rates for each given ratio.

5.  $\frac{3}{4}$  inch :  $\frac{1}{2}$  hour

6.  $\frac{4}{5}$  gallon :  $\frac{1}{4}$  cup