LESSON 1-2 Practice A
Algebraic Expressions

Write an algebraic expression for each phrase.

1. 2 less than d
   $d - 2$
2. x increased by 8
   $x + 8$
3. the product of 10 and q
   $10q$
4. the quotient of b and 7
   $\frac{b}{7}$
5. 5 more than h
   $h + 5$
6. the product of p and 9
   $9p$
7. 3 times the sum of n and 5
   $3(n + 5)$
8. 8 plus the product of 2 and b
   $8 + 2b$

Write a word phrase for each algebraic expression.

9. $7n$
   the product of 7 and n
10. $11 + c$
    11 increased by c
11. $x - 36$
    36 less than x
12. $y \div 9$
    y divided by 9
13. $m + 20$
    20 more than m
14. $\frac{q}{12}$
    the quotient of q and 12
15. $6b + 8$
    8 more than 6 times b
16. $5k - 3$
    3 less than the product of 5 and k
17. Morgan earns \$6 per hour babysitting. Write an expression to evaluate how much money Morgan will earn if she babysits for 2, 3, 4, or 5 hours.

n	$6n$	Earnings
2	6(2)	\$12
3	6(3)	\$18
4	6(4)	\$24
5	6(5)	\$30

18. Write a word problem that can be evaluated by the expression $18 + r$ and evaluate it for $r = 12$.
    Possible answer: Mr. Meb ran 18 miles last week. If Mr. Meb ran r miles this week, how many miles did he run in two weeks? 30 miles

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LESSON 1-2 Practice B
Algebraic Expressions

Write an algebraic expression for each word phrase.

1. 6 less than twice x
   $2x - 6$
2. 1 more than the quotient of 21 and b
   $1 + \frac{21}{b}$
3. 3 times the sum of b and 5
   $3(b + 5)$
4. 10 times the difference of d and 3
   $10(d - 3)$
5. the sum of 11 times s and 3
   $11s + 3$
6. 7 minus the product of 2 and x
   $7 - 2x$

Write a word phrase for each algebraic expression.
Phrases may vary. Possible answers are shown.

7. $2n + 4$
   4 more than twice n
8. $3r - 1$
   1 less than the product of 3 and r
9. $10 - 6n$
   the difference of 10 and 6 times n
10. $7 + \frac{2}{c}$
    7 more than 2 divided by c
11. $15x - 12$
    12 less than the product of 15 and x
12. $\frac{y}{5} + 8$
    8 more than the quotient of y and 5
13. Maddie earns \$8 per hour. Write an algebraic expression to evaluate how much money Maddie will earn if she works for 15, 20, 25, or 30 hours.

n	$8n$	Earnings
15	8(15)	\$120
20	8(20)	\$160
25	8(25)	\$200
30	8(30)	\$240

14. Write a word problem that can be evaluated by the algebraic expression $y - 95$, and evaluate it for $y = 125$.
    Possible answer: Marco has saved y dollars. He wants to buy a skateboard that costs \$95. How much money will Marco have left after he buys the skateboard? \$30

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LESSON 1-2 Practice C
Algebraic Expressions

Write an algebraic expression for each word phrase.

1. 9 times the sum of d and 13
   $9(d + 13)$
2. the sum of 25 times w and 10
   $25w + 10$
3. twice the quotient of b and 24
   $2\left(\frac{b}{24}\right)$
4. 6 times the difference of z and 19
   $6(z - 19)$
5. 20 more than the quotient of w and 4
   $20 + \frac{w}{4}$
6. half the sum of y and 8
   $\frac{1}{2}(y + 8)$

Write a word phrase for each algebraic expression. Phrases may vary. Possible answers are shown.

7. $\frac{y}{6} + 9$
   9 more than the quotient of y and 6
8. $74k - 123$
   123 less than the product of 74 and k
9. $450 - 12a$
   the difference of 450 and 12 times a
10. $46 + \frac{200}{n}$
    46 more than 200 divided by n
11. $3 + 5n$
    3 plus the product of 5 and n
12. $180w + 52$
    52 more than product of 180 and w
13. The computer club is trying to raise \$960 to buy new equipment. The club is hoping each member can raise the same amount of money. Write an algebraic expression to evaluate how much will be needed from each member of the club if there are 6, 8, 10, or 12 club members.

n	$\frac{960}{n}$	Earnings
6	$\frac{960}{6}$	\$160
8	$\frac{960}{8}$	\$120
10	$\frac{960}{10}$	\$96
12	$\frac{960}{12}$	\$80

14. Write a word problem that can be evaluated by the algebraic expression $d + 226$ and evaluate it for $d = 79$.
    Check students' problems. 305 miles

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LESSON 1-2 Reteach
Algebraic Expressions

What words tell you to add, subtract, multiply, or divide?

Add $n + 6$	Subtract $n - 6$	Multiply $6n$	Divide $n \div 6$
n plus 6	n minus 6	n times 6	n divided by 6
the sum of n and 6	the difference between n and 6	the product of n and 6	the quotient of n and 6
6 added to n	6 subtracted from n	6 multiplied by n	6 equal shares of n
n increased by 6	6 less than n		
	n decreased by 6		

Write the algebraic expression that represents the word expression.

1. the quotient of n and 3
   $n \div 3$
2. 3 more than n
   $n + 3$
3. the product of 3 and n
   $3n$
4. n decreased by 3
   $n - 3$
5. 3 less than n
   $n - 3$
6. the product of n and 3
   $3n$
7. n increased by 3
   $n + 3$
8. one-third times n
   $\frac{1}{3}n$ or $n \div 3$

Write a word phrase for each algebraic expression.
Phrases may vary. Possible answers are shown.

9. $4n$
   the product of 4 and n
10. $2 + n$
    2 increased by n
11. $n - 5$
    5 less than n
12. $n \div 3$
    n divided by 3
13. $n + 9$
    9 more than n
14. $\frac{n}{2}$
    the quotient of n and 2

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