

1-1 Practice

Write an algebraic expression for each word phrase.

1. 10 less than x
 $x - 10$

2. 5 more than d
 $d + 5$

3. 7 minus f
 $7 - f$

4. the sum of 11 and k
 $11 + k$

5. x multiplied by 6
 $x \cdot 6$
 $6x$

6. a number t divided by 3
 $\frac{t}{3}$

7. one fourth of a number n
 $\frac{1}{4}n$

8. the product of 2.5 and a number t
 $2.5t$

9. the quotient of 15 and y
 $15 \div y$ $\frac{15}{y}$

10. a number q tripled
 $3q$

11. 3 plus the product of 2 and h
 $3 + 2h$

12. 3 less than the quotient of 20 and x
 $\frac{20}{x} - 3$

Write a word phrase for each algebraic expression.

13. $n + 6$

14. $5 - c$
5 minus c

15. $11.5 + y$

16. $\frac{x}{4} - 17$
The difference of the quotient of x and 4 and 17

17. $3x + 10$

18. $10x + 7z$
the sum of 10 times x and the product of 7 and z .

Write a rule in words and as an algebraic expression to model the relationship in each table.

19. The local video store charges a monthly membership fee of \$5 and \$2.25 per video.

Videos (v)	Cost (c)
1	\$7.25
2	\$9.50
3	\$11.75

$\Rightarrow 5 + 2.25(1)$
 $\Rightarrow 5 + 2.25(2)$
 $\Rightarrow 5 + 2.25(3)$

$5 + 2.25v$

1-1 Practice (continued)

20. Dorothy gets paid to walk her neighbor's dog. For every week that she walks the dog, she earns \$10.

Weeks (w)	Pay (p)
4	\$40.00
5	\$50.00
6	\$60.00

Write an algebraic expression for each word phrase.

21. 8 minus the quotient of 15 and y
22. a number q tripled plus z doubled
23. the product of 8 and z plus the product of 6.5 and y
24. the quotient of 5 plus d and 12 minus w
25. **Error Analysis** A student writes $5y \cdot 3$ to model the relationship *the sum of $5y$ and 3*. Explain the error.
26. **Error Analysis** A student writes *the difference between 15 and the product of 5 and y* to describe the expression $5y - 15$. Explain the error.
27. Jake is trying to mail a package to his grandmother. He already has s stamps on the package. The postal worker tells him that he's going to have to double the number of stamps on the package and then add 3 more. Write an algebraic expression that represents the number of stamps that Jake will have to put on the package.