

## Statements Translated into Algebraic Language Using X as the Unknown

<u>STATEMENT</u>	<u>ALGEBRA</u>
1. Twice as much as the unknown	$2x$
2. Two less than the unknown	$x-2$
3. Five more than the unknown	$x+5$
4. Three more than twice the unknown	$2x+3$
5. A number decreased by 7	$x-7$
6. Ten decreased by the unknown	$10-x$
7. Sheri's age (x) 4 years from now	$x+4$
8. Dan's age (x) 10 years ago	$x-10$
9. Number of cents in 2x dimes	$10(2x)$
10. Number of cents in x quarters	$25x$
11. Number of cents in x+5 nickels	$5(x+5)$
12. Separate 17 into two parts	x and $17-x$
13. Distance traveled in x hours at 50 mph	$50x$
14. Two consecutive integers	x and $x+1$
15. Two consecutive even integers	x and $x+2$
16. Two consecutive odd integers	x and $x+2$
17. Interest on x dollars for 1 year at 5%	$0.05x$
18. \$20,000 separated into two investments	x and $20,000-x$
19. Distance traveled in 3 hours at x mph	$3x$
20. Distance traveled in 40 minutes at x mph (40 minutes = $\frac{2}{3}$ of an hour)	$2x/3$
21. Sum of a number and 20	$x+20$
22. Product of a number and 3	$3x$
23. Quotient of a number and 8	$x/8$
24. Four times as much	$4x$
25. Three is four more than a number	$3 = x+4$

### ADD

sum  
add  
more than  
increased by  
plus  
total

### SUBTRACT

difference  
subtract  
less than  
decreased by  
minus

### MULTIPLY

product  
times  
twice  
percent of  
multiply

### DIVIDE

quotient  
ratio  
divided by  
into

*Is, was, will be,* become the equals sign (=) in algebra.

If 7 exceeds 2 by 5, then  $7 - 2 = 5$ . *Exceeds* becomes a minus sign ( - ) and *by* becomes an equals sign ( = ).