## Common Translation Phrases for Algebraic Expressions and Equations



## Translate the following into expressions (no equal sign):

1. $w$ more than 3
2. $w$ less than 7
$\qquad$
3. 5 subtracted from w
4. Twice the sum of $x$ and $y$
5. One-fifth of a number
6. 9 decreased by $x$
7. $m$ increased by 14
8. The sum of $t$ and $u$, divided by 6
9. Sixteen less than two times a number
10. Three more than five times a number
$\qquad$
$\qquad$
$\qquad$
$\square$
11. A number decreased by 7
12. Three subtracted from twice a \#
13. 25 less than $x$
14. Twice $x$
15. The product of $5 r$ and s
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Complete each table using substitution.

1. $\quad$| $n$ | $3 n$ |
| :---: | :---: |
| 5 |  |
| 10 |  |
| 15 |  |
2. 

| $n$ | $n \div 8$ |
| :---: | :---: |
| 0 |  |
| 1 |  |
| 8 |  |
| 16 |  |

2. 

| n | $\mathrm{n}+7$ |
| :--- | :--- |
| 3 |  |
| 5 |  |
| 7 |  |

5. 

| n | 4 less than n |
| :---: | :--- |
| 20 |  |
| 18 |  |
| 16 |  |
| 14 |  |

3. 

| $n$ | $n-70$ |
| :---: | :---: |
| 80 |  |
| 100 |  |
| 120 |  |

6. 

| n | 2 more than n |
| :---: | :--- |
| 20 |  |
| 18 |  |
| 16 |  |
| 14 |  |

Translations for Algebra

## Translating words into EQUATIONS:

1. START WITH THE EQUAL SIGN
2. Replace phrases like "what number", "a number", "some number" with the variable, $x$.
3. Translate the rest of the problem using the clue words from the other side.

Example 1: Ten times what number equals 70.


## Translate the following into equations.

1. The product of 5 and a number is 45 .
2. One-ninth of a number is 54 .
3. 89 less than a number equals 8.
4. $\quad$ Three less than six times what number is 15.
5. The sum of a number and eleven times the same number is 48 .
6. A number multiplied by five plus six is equal to 50 .
7. A number divided by five less seven is equal to 37 .
8. A number plus 17 plus three times the number equals 15.
9. If you subtract 8 from a specific number, you get 12 .
10. If you add 13 to seven times a number, your answer is 127 more than the number itself.
11. Alonzo bought 5 boxes of trading cards. There were the same number in each box. He bought a total of 55 trading cards.
12. Juanita can jog 12 miles today, which is twice as far as she could a year ago. A year ago, she could jog $x$ miles. How far could she jog a year ago?

Example 2: 19 less than twice a number is $\mathbf{- 9}$.

13. 8 more than 4 times a number is 48 .
14. Nine times a number, less 9 , is 36 .
15. The sum of 12 and the product of 6 and a number is 60 .
16. 15 less than the product of 6 and a number is 15 .
17. Three times a certain number is the same as that number plus 15.
18. Twice the sum of a certain number and 36 is 90 .
19. Seventeen more than twice a number is 48 .
20. Take a number, double it, add 7 and you get 23 .
21. If you multiply a number by 13 you get 117 .
22. If you add six to five times a number, your answer will be 45 more than twice the number.
23. Mary scored $x$ points. Emily scored one less than twice as many. The girls scored a total of 35 points.
24. The perimeter of rectangle $(P)$ is equal to twice its width (W) added to twice its length (L).

