SWBAT translate word expressions into mathematical equations and solve for the determined variable.
Translating Symbols into Words


Directions: Translate the following into algebraic expressions. Use " $x$ " as the unknown variable.

1. Fourteen divided by a number $\qquad$
2. Seven times a number $\qquad$
3. 10 less than a number $\qquad$
4. 12 more than a number $\qquad$
5. 4 times a number plus 5 times the same number $\qquad$
6. The sum of 6 and a number divided by 10 $\qquad$
7. 20 decreased by 4 times a number $\qquad$
8. One-half the product of 8 and a number $\qquad$

# Solving Multi-Step Word Problems 

Step 1: Read the problem
Step 2: Underline or highlight the question
Step 3: Define the variable
Step 4: Reread the problem and write the equation
Step 5: Solve!
One Unknown (easy): Jennifer has $\$ 25.00$. She needs $\$ 49.00$ to buy a new school outfit. How much more money does she need?

One Unknown (difficult): Martha takes her niece and nephew to a concert. She buys T-shirts and bumper stickers for them. The bumper stickers cost $\$ 1$ each. Martha's niece wants 1 shirt and 4 bumper stickers, and her nephew wants 2 shirts but no bumper stickers. If Martha's total is $\$ 67$, what is the cost of one shirt?

Consecutive Integer Word Problems
Integer: A positive or negative whole number.
Consecutive: In a row

| Consecutive Integer |  | Consecutive Even Integers |  | Consecutive Odd Integers |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Example: | In terms of $\mathbf{n}$ | Example: | In terms of $\boldsymbol{n}$ | Example: | In terms of $\mathbf{n}$ |
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Consecutive Integer: Three consecutive integers add to a sum of -96. What is the largest (closest to zero) of the three integers?

Consecutive Integer (difficult): There are two consecutive integers such that four times the smaller plus three less than twice the larger is 71 . What are the two integers?

Consecutive Odd/Even Integer: Two consecutive odd integers have a sum of 40 . What are the two numbers?

Consecutive Odd/Even Integer (difficult): There are three consecutive even integers such that the sum of twice the smallest, one less than the middle, and four more than the largest is -15 . What are the three integers?

