Math 1 Consecutive Integer Word Problems Unit 1 Day 3

*SWBAT translate word expressions into mathematical equations and solve for the determined variable.*

**Translating Symbols into Words**

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| --- | --- |
| + | - |
| ÷ | x |

**Directions:** Translate the following into algebraic expressions. Use “x” as the unknown variable.

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

**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

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| --- | --- | --- | --- | --- | --- |
| **Consecutive Integer** | | **Consecutive Even Integers** | | **Consecutive Odd Integers** | |
| **Example:** | **In terms of n** | **Example:** | **In terms of n** | **Example:** | **In terms of 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?