

Name: _____

Date: _____

AIM: How can we solve word problems involving simplifying equations?

Do Now: Describe and correct the error in each equation below.

$$3x + 10 = 9$$

$$\frac{\cancel{3}x + 10}{\cancel{3}} = \frac{9}{3}$$

$$\begin{array}{r} x + \cancel{10} = 3 \\ - \cancel{10} \quad -10 \\ \hline x = -7 \end{array}$$

$$4f - 8 = 10$$

$$\begin{array}{r} 4f - \cancel{8} = 10 \\ +8 \quad +8 \\ \hline 12f = 10 \end{array}$$

$$\begin{array}{r} \frac{\cancel{12}f}{12} = \frac{10}{12} \\ \hline f = \frac{10}{12} \end{array}$$

$$2x + 1 + 4x = 13$$

$$\frac{\cancel{7}x}{7} = \frac{13}{7}$$

$$\boxed{x = \frac{13}{7}}$$

4. Find three consecutive integers whose sum is 288.

Consecutive Even and Odd Integers

What about consecutive even or odd integers?

Name the next three consecutive **odd** integers after 3: _____, _____, _____

Name the next three consecutive **odd** integers after -5: _____, _____, _____

Name the next three consecutive **odd** integers after x : _____, _____, _____

Name the next three consecutive **even** integers after 6: _____, _____, _____

Name the next three consecutive **even** integers after -8: _____, _____, _____

Name the next three consecutive **even** integers after x : _____, _____, _____

11.) Find two consecutive even integers whose sum is 106

12.) Find three consecutive odd integers whose sum is 27.

13.) Find three consecutive even integers whose sum is 72.

$6n + 10 - n - 20 = 65$ Check	$-8(x + 2) = 104$ Check
$5x + 34 + 3x - 10 = -32$ Check	$-3(2x + 6) = 54$ Check
$6(m - 3) + 3m = 9$ Check	



If x is an even/odd integer, the next two consecutive even/odd integers are:

_____ and _____