4.2: Consecutive/Sum Of Two Numbers Problems

Consecutive Integers: **Integers** that follow each other in order. They have a difference of 1 between every two numbers. In a set of **conselcutive integers**, the mean and the median are equal. If n is an **integer**, then n, n+1, and n+2 would be **consecutive integers**.

Ex 1) The sum of three consecutive integers is 120. Find the numbers.

1st number	2nd number	3rd number	sum
x	$x+1$	$x+2$	120

$x+x+1+x+2=120$

$3x=117$

$x=39$

∴ The numbers are 39, 40, 41

Ex 2) I am thinking of two consecutive odd numbers such that three times the larger minus twice the smaller is nineteen. Let x and $x+2$ represent the 2 numbers.

$3(x+2)-2(x)=19$

$3x+6-2x=19$

$x=13$

∴ The numbers are 13 and 15.

Ex 3) The sum of two numbers is 39. Twice the first plus 3 times the second number is 101. Find the numbers. Let x represent the first number

∴ $39-x$ represents the second number.

$2x+3(39-x)=101$

$2x+117-3x=101$

$-x=-16$

$x=16$

∴ The numbers are 16 and 23.

Extra Practice: Complete the homework: CP page 33,34, 35 # 4abc