

## Combining Integers

Video: <https://www.youtube.com/watch?v=KLXLcqhxakM>

Sometimes when we are adding and subtracting integers, we will have a lot of signs in our problem. There is a way to help us “clean up” our problems by combining integer signs.

Let’s look at the following problem:

$$(+2) + (+4) + (-8) =$$

Adding a positive could simply be written as +, so  $(+2) + (+4)$  could be written as  $2 + 4$ .

Adding on a negative is like owing something. It is not a good thing! We can write it as - .  
So...

$$4 + (-8) \text{ could be written as } 4 - 8.$$

Getting rid of the “double signs”, helps to make the problem much cleaner and easier to solve.

So...  $(+2) + (+4) + (-8)$  can simply be written as  $2 + 4 - 8$

Here’s another example:

$$(-3) + (-5) - (-6) + (+4) \text{ can be written as } -3 - 5 + 6 + 4$$

To calculate the answer to this question, we just need to tally up all the positive numbers and all the negative numbers and add them together.

+	-
+6	- 3
+4	- 5

$$+10 \quad + \quad -8 \quad =$$

$$+2$$

Remember:

- + ( + ) gives us +
- + ( - ) gives us -
- ( + ) gives us -
- ( - ) gives us +

OVER→

Try these!

$$(+3) + (-4) - (-9) =$$

$$(-9) - (+5) - (-7) + (+2) =$$

$$(-8) - (+3) + (-6) - (-7) =$$

$$(-2) + (-4) - (-8) + (+2) =$$

$$(+9) + (-5) - (-7) + (-4) =$$

$$(-6) + (-2) - (-3) =$$

Make up some for a classmate to try: