When adding/subtracting integers

1. When adding and subtracting integers, we want to **eliminate double signs** and simplify the expression so that we have **sign-number** *sign-number* sign-number...(numbers belong to the sign in front of them)
2. Once we have it simplified, we can collect and **add together all the positive numbers** to make one larger positive number and collect and **add together all the negative numbers** to make one larger negative number.
3. Finally, we **add the positive and negative number to get the final answer.**

Here's how:

1. We want single signs between each number when we add/subtract integers. When two signs "bump up together" with NO numbers in between, we are looking at **double signs**.

We simplify them into single signs using the same rules as for multiplication:

+ (+) = + + (-) = -
- (-) = - - (+) = +

2. Once we have only single signs in our expression, we can add together all of the positives and all of the negatives separately (**note**: each number *belongs* to the sign in front of it. If we see no sign, then it is assumed to be (+)).

3. Now that we have only **one positive number and one negative number,** we can calculate our final answer in 2 possible ways:
   i) Using the calculator
   ii) Using mental math: find the difference between the (+) and (-)
   numbers and give this value the same sign as the larger number.

Example

15+(-6)-(-4)-(+12

Example 3 Evaluate the following expressions.

a) $4+(-3)$

b) $6-(-2)$

c) $-1-(+7)$

d) $-2-(-7)+3$

e) $+9-(-1)+(-2)$

f) $-2-(-2)+(+2)+(-2)$

Practice!

Worksheet (everything left)