

PreAlgebra—Unit 1—Lesson 2-2 Adding Integers

Lesson Goals: Add integers accurately.

OAS: Review Skills: 6.N.2.1 and 7.N.2.6

Vocabulary:

Zero Pair: one negative and one positive....if added they will equal zero

Opposites: a positive and negative version of the same number (-3 and 3)

Additive inverse: another name for opposites

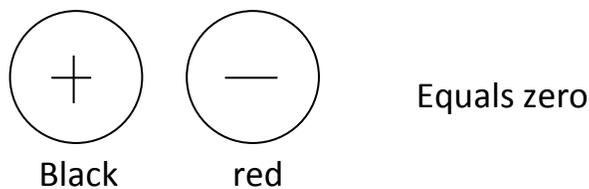
Integer Chips

Your parents probably have a bank account....if it is “in the black” that means its good!! There is money in there!!!

If it is “in the red”, that’s bad...it means they are overdrawn and their account is in the negative.

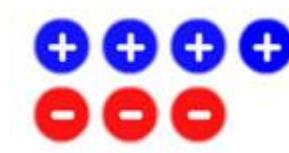
We will use black chips to represent positive numbers and red chips to represent negative numbers.

If we put on black (+) and one red (-) together, we end up with a zero value because they cancel each other out....this is called a zero pair

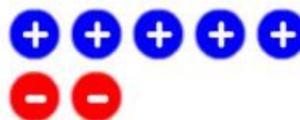


So, we can eliminate all zero pairs, because they equal zero! This will help us see what we have left over.

$$(4) + (-3)$$



Three zero pairs = zero, we have one positive left over, so the answer is +1



$$-2 + 5$$

Two zero pairs = zero and we have three positives left over, so the answer is +3

Adding and subtracting integers: Remember to sing!!!
(sung to "row row row your boat")

"Same signs add them up...

Different signs subtract....

Keep the sign of the further number (further from zero)

Then you'll be exact."

It is much easier to look at a number sentence as a group of positive and negative numbers than plus and minus signs.

$$-3 + 4$$

Is really a

-3 and a $+4$ (different signs subtract)

Ex) $-14 + 9$

Step 1: Box your number: $\boxed{-14} \boxed{+9}$

Step 2: Think about it: Do you have more negatives or positives? (negatives in this problem)....whichever you have more of, your answer will be that sign.

Step 3: Add or subtract.... "same signs add them up, different signs subtract"

In this problem we have different signs, so we will subtract.

So, $-14 + 9 = -5$

Ex) $-10 + (-8)$

Step 1: Box your number: $\boxed{-10} \boxed{+(-8)}$ we can ignore the + in the middle because we only want the signs that go with the numbers.

Step 2: Think about it: Do you have more negatives or positives? (negatives in this problem)....whichever you have more of, your answer will be that sign.

Step 3: Add or subtract.... "same signs add them up, different signs subtract"

In this problem we have same signs, so we will add.

So, $-10 + (-8) = -18$