

Adding Integers

Ex 1.

Suppose you have \$150 of debt on a credit card. If you used the card to pay for a \$100 textbook, what would the balance be on your card?

How could you write this as a number sentence using negative numbers?

Ex 2.

Suppose you have \$150 of debt on a credit card. If you made a payment of (i.e. credit the card for) \$80, what would the balance be on your card?

Ex 3.

Suppose you have \$150 of debt on a credit card. If you made a payment of (i.e. credit the card for) \$170, what would the balance be on your card?

If _____ sign, _____ their absolute values and keep same sign.

ex: $-6 + (-3) = -9$

If _____ signs, _____ their absolute values and keep sign of number with greater absolute value.

ex: $-5 + 3 = -2$ and $-2 + 3 = 1$

Ex 4.

$$-40 + (-21) =$$

$$17 + (-13) =$$

$$15 + (-23) =$$

When adding many integers, it is easier to add positive and negative numbers separately:

Ex 5.

$$4 + (-7) + 5 + (-18) =$$

$$-23 + (-14) + 7 + (-4) + 10 + 18$$

Two numbers that _____ to ____ are call _____.

ex: 5 and -5 are additive inverses since $5 + (-5) = 0$

Ex 6.

Find the additive inverse of 6.

Ex 7.

Find the additive inverse of -3 .

Note: The minus sign ($-$) can mean:

1. Subtract (ex: $7 - 2$ “seven minus two”)
2. Negative (ex: -3 “negative three”)
3. Additive inverse (ex: $-(-3)$ “the additive inverse of negative three”)