🟡 = +1   🟤 = -1

🟡 + 🟤 = 0

ZERO PAIR!

Use Zero Pairs to find each sum:

3 + (-9) = $\boxed{-6}$ -5 + 3 = $\boxed{-2}$

-3 + 5 = $\boxed{2}$ -1 + (-7) = $\boxed{-8}$

You can also use a number line to find the sum of two integers. To add a **positive** integer move to the RIGHT, to add a **negative** integer move to the LEFT.

Find the sum using a number line.
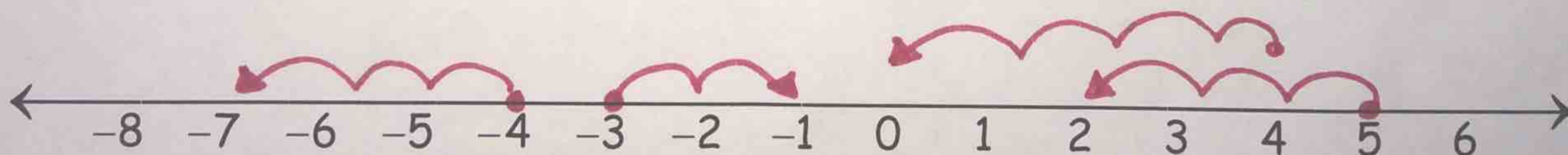
<u>Ex</u>: -4 + (-3)   <u>Ex</u>: -3 + 2   <u>Ex</u>: 5 + (-3)   <u>Ex</u>: 4 + (-4)

$\boxed{-7}$ $\boxed{-1}$ $\boxed{2}$ $\boxed{0}$

How can you tell whether the sum will be positive/negative/zero?

the "bigger" # (bigger abs. val.)

Ex: What is the net result of an 8-yard loss in football followed by a 10-yard gain?

2-yard-gain

Ex: What is the net result of scoring 25 points in a video game then losing 40 points?

a loss of 15 points

Try These:

Use color counters or a number line to find each sum.

(1) -8 + (-3)

-11

(2) -3 + 12

9

(3) 5 + (-11)

-6

(4) 7 + (-7)

0

(5) -6 + (-2)

-8

(6) -5 + 9

4

(7) 15 + (-9)

6

(8) -10 + 10

0

(9) -6 + (-6)

-12

(10) 14 + (-14)

0

(11) 3 + (-2) + 5

1 + 5

6

(12) -4 + 2 + (-5)

-2 + (-5)

-7

What patterns do you notice?

To Add Integers:

with SAME SIGNS
Add the absolute values, keep the same sign

with DIFFERENT SIGNS
Subtract (bigger absolute value always goes 1st), use the sign of the number with the bigger absolute value

---

SING IT!
(row your boat)

Same signs, add and keep
Different signs, subtract
Take the sign of the larger number,
Then you'll be exact!

Find the sum using the rules.

Ex: -8 + (-5)   Ex: -20 + (-15)   Ex: 14 + (-8)

$\boxed{-13}$ $\boxed{-35}$ $\boxed{6}$

Try These:
Find the sum using the rules.

(13) -14 + 8   (14) 5 + (-10)   (15) -345 + 543   (16) -210 + 210

$\boxed{-6}$ $\boxed{-5}$ $\boxed{198}$ $\boxed{0}$

Is addition commutative?   -2 + (10) = $\boxed{8}$ 10 + (-2) = $\boxed{8}$
YES!

Additive Inverse Property

The sum of an integer and its opposite (additive inverse) is always 0.

$a + (-a) = 0$

Ex:

JULY TRANSACTIONS	
Withdrawal	-$40
Deposit	$50
Deposit	$75
Withdrawal	-$50

The list shows four bank account transactions in July. Find the change **C** in the account balance.

$C = -40 + 50 + 75 + (-50)$

$C = -40 + 75 + \underline{50 + (-50)}$ Comm. Prop.

$C = -40 + 75 + 0$

$C = 35 + 0$

$C = 35$

$\boxed{\text{The account balance increased \$35 in July.}}$