11.3 Subtracting Integers

Essential Question

How are adding integers and subtracting integers related?

Today's Learning Goals:

- Subtracting integers.
- Solve real-life problems.

Review

Add.

1) $-4+(-15)=$

2) $-20+6=$

3) $18+(-5)=$

4) $-24+19=$

5) $-18+(-20)=$

6) $4+(-1)+(-5)=$

7) $-7+2+(-1)=$

SAME SIGN	DIFFERENT SIGNS
•Ignore the signs •Add numbers •Put sign back	•Ignore the signs •Subtract •Put sign back of number that "looks" the biggest

Seeing how subtraction is related to addition…

Addition	Subtraction
3 + -3 =	3 – 3 =
3 + -2 =	3 – 2 =
3 + -1 =	3 – 1 =
3 + 0 =	3 – 0 =
3 + 1 =	3 – -1 =
3 + 2 =	3 – -2 =
3 + 3 =	3 – -3 =

Rule for Subtracting Integers

To subtract integers, add the opposite!

What does this mean?

Your goal is to change a subtraction problem into an addition one.

How?

Keep, Change, Change!

$$-5 - (-2)$$

Try to do the following:

Subtract. Keep, Change, Change!

1) $-4 - 3 =$

2) $6 - (-4) =$

3) $18 - 20 =$

Practice

Subtract. Keep, Change, Change!

4) $-9 - 5 =$

5) $27 - (-8) =$

6) $-3 - (-1) =$

7) $-8 - 9 =$

8) $14 - 17 =$

9) $4 - (-19) =$