

Name: _____

Homework:

Copy these Notes 2 times. As you copy the notes read out what you are writing.

Read these Notes 5 times out loud. Check the boxes after you read.

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Negative and Positive Numbers!

Rules for Multiplying or Dividing Negative and Positive Numbers

These rules do **NOT** tell me if I divide or multiply, they **DO** tell me if my answer is negative or positive!

- 1.) Multiply or Divide the numbers.
- 2.) Look at the the signs. If the signs of your numbers are the same, then your answer is always positive!
- 3.) If the signs of your numbers are different, then your answer is always negative!

Examples: $-4 \times -2 = 8$ (signs are the same so my answer is positive)
 $5 \times 4 = 20$ (signs are the same so my answer is positive)
 $-3 \times 6 = -18$ (signs are different so my answer is negative)
 $5 \times -7 = -35$ (signs are different so my answer is negative)

Rules for Adding or Subtracting negative or positive numbers

These rules **DO** tell me if I will add or subtract **AND** if my answer is negative or positive!

FIRST... BEFORE you know if you are going to **ADD** or **SUBTRACT**...

Look to see if your problem has a **minus (subtraction) sign** or a **plus sign** *between* your numbers...

If your problem has a subtraction symbol, **change** the **subtraction** symbol to the **addition** symbol **AND switch** the **sign** of the **number BEHIND** the **addition** symbol to the **opposite** sign!

Examples: $5 - 10 \dots 5 + -10$ (minus 10 changes to plus -10) $4 - -3 \dots 4 + 3$ (minus -3 changes to plus 3)
 $-6 - 2 \dots -6 + -2$ (minus 2 changes to plus -2) $-10 - -12 \dots -10 + 12$ (minus -12 changes to plus 12)

NOW... follow these rules:

- 1.) If the **signs** of your numbers **are the same**, then **ADD** your numbers. If your numbers are positive then your answer is positive. If your numbers are negative then your answer is negative.

Examples: $-5 + -4 = -9$ $4 + 3 = 7$ $-1 + -11 = -12$

- 2.) If the **signs** of your numbers **are different**, then **SUBTRACT** your numbers. Look at your numbers and decide which has more this will tell you the sign of your answer.

Examples: $6 + -3 = 3$ (different signs, subtract... I have more positive... answer is positive)
 $8 + -10 = -2$ (different signs, subtract... I have more negative... answer is negative)
 $-12 + 8 = -4$ (different signs, subtract... I have more negative... answer is negative)
 $-5 + 8 = 3$ (different signs, subtract... I have more positive... answer is positive)