



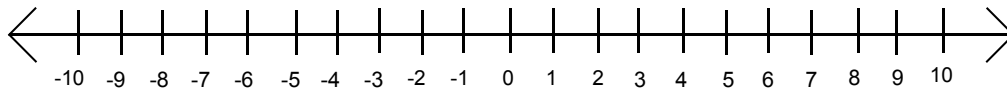
Please take your seat and pass out notebooks.
Have your notebook, planner and pencil on your desk.

hello - time to get started! Make sure your things are under your desk and open your notebooks to the last page you took notes.
Draw a line and write today's date 9/11/09

Write the following problems down and solve them.

$$-4 + 5 = \quad -2 - 6 = \quad 3 - 8 = \quad 4 - 9 =$$

think about solving these problems using the number line.



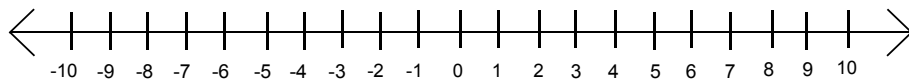
Let's review - :)

What is an integer?

What is the absolute value of a number?

Which is greater 1.34 or 1.345?

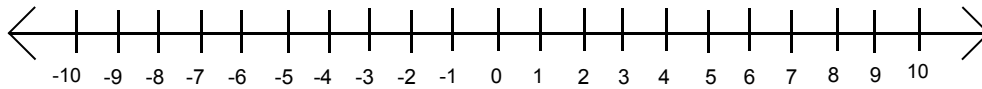
What is a rational number?



What do these signs mean?

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Which is greater 1.34 or 1.345?



Which is greater 1.076 and 1.07?

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Whenever you see a negative sign between two integers, read that as "and the opposite of" this is true for the FIRST negative sign found between any two integers - negative or positive.

Let's look at the problems below:
(copy this into your notes)

$$7 - - 4 = \cdot$$

$$7 - 4 =$$

$$\overset{\cdot}{-}8 - - 3 =$$

$$- 8 - 3 =$$

How do we solve subtraction problems with integers?

What is $10 - -3$? What does this problem mean?

(How can we read it so we understand it?)

Many teachers will just say that two negatives found together in a number sentence change to one positive.

therefore $10 - -3$ is the same as $10 + 3$ and the answer is 13.



Copy these problems in your notebook and solve them.

$$-8 - -2 =$$

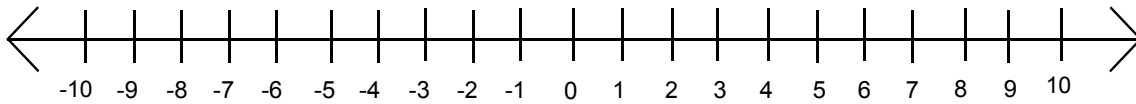
$$9 - 3 =$$

$$-9 - -3 =$$

$$-10 - -4 =$$

$$-10 - 4 =$$

Below is a number line from negative 10 and positive 10.
Between what two integers does the number -2.65 fall?
Is -2.65 greater or less than -2.6?
How do you know?



In summary:

Addition Algorithm

When a problem has two different signs (a negative and a positive) your answer will be found by taking the sign of the number that is farthest from 0 and then finding the difference of the larger absolute value and the smaller absolute value.

Different signs

Example $-4 + 6 =$ the answer will be positive because 6 is farther from zero than -4 on the number line

The difference of the absolute values of the numbers is 2 because $6 - 4$ equals 2

Same signs

When the signs are the same (example a positive value and a positive value or a negative value and a negative value) as in $3 + 8$ or $-2 - 3$ the sign of your answer will be the same as the sign of the values in the problem. Just add the absolute values of the numbers in your problem and use the sign that is found on both numbers.

Example

$3 + 8$ will have a positive solution and the solution is 11.

$-2 - 3$ will have a negative answer and the answer is - 5.

When you have a problem like

$-4 + 6 - - 8 + 10 + 12 - 2$ first change - -8 to positive 8

$-4 + 6 + 8 + 10 + 12 - 2$ then combine the negatives

-4 and $-2 = -6$ and $6 + 8 + 10 + 12 = 36$

and $-6 + 36 = 30$