**Rational Numbers**

What is a Rational Number?

* = A number that *can be* written in the form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
	+ Examples: \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_
	+ Also examples: \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_
	+ Are integers rational numbers??

Fractions

* One type of rational number is a fraction
* Fraction= A number written in the form a/b, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Fractions can be
	+ Regular: $\frac{1}{2}$
	+ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_: $\frac{9}{2}$
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: 4 $\frac{1}{2}$

Plotting Fractions

* Where would the following go on the number line?

1/2 3/2 1/3 -4/5 -7/3

 

* You Try!
* Plot the following numbers on a number line:

5/7 -4/3 2/1 -3/-2



Adding and Subtracting Fractions

* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (bottom number) must be the same before fractions can be added or subtracted
	+ Example $\frac{7}{3}$ - $\frac{2}{3}$ = \_\_\_\_
* If they are not the same, we have to find the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ Example: $\frac{2}{3}$ + $\frac{2}{5}$ = $\frac{10}{15}$ + $\frac{6}{15}$ = $\frac{16}{15}$

What if the fractions are negative?

* Adding and subtracting negative fractions use the same rules as adding and subtracting integers
	+ Example: 3/4 + (-9/4) = -6/4
	+ Example: (-3/2) – (8/3) = (-9/6) – (16/6) = \_\_\_\_\_\_\_\_\_\_

You Try!

|  |  |
| --- | --- |
| 1. -6/9 + (-4/9)
 | 1. 4/5 – (-3/4)
 |
| 1. -7/2 – 5/2
 | 1. 6 $\frac{2}{3}$ + (-3/5)
 |
| 1. -6 + (2/3)
 |  |