**3.5 Dividing Rational Numbers**

* Solve Problems that require dividing rational numbers

To divide rational numbers, use the properties for determining the sign of the quotient of 2 integers to predict the sign of the quotient of the rational numbers. (Let’s review those together now. Use your own shorthand to write down the properties in the space below)

Then:

* If the rational numbers are in fraction form:
  + Change any mixed fractions into improper form
  + Multiply by the reciprocal.
  + Reduce if necessary
* If the rational numbers are in decimal form
  + Use the procedures for dividing 2 decimal to determine the numerical value of the quotient. ( Again old school so sharpen the pencils)

Example #1 Example #2

Example #3 Example #4

(-1.38)÷0.6 (-0.25)÷(-0.3)

**Solving Problems Involving Rational Numbers**

At a sea port, the effect of the tide changed the water level by -5.6 m in 3.5 hours. What was the mean change in water level per hour?

You Try:

On a winter’s day, the temperature at 6 P.M. was 0°C. Suppose the temperature decreased by 2.5°C each hour until it was -12.5°C. How long did it take to reach this temperature? How do you know?