Name:_____ Date:_____

Notes
Algebra Section 2.6
Pages 103-108

Goal: "You will divide real numbers"

Division:

Think socks!

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If your socks don't match, that's a negative!
If your socks match, that's a positive!

Negative ÷ Negative=Positive

Match!

Negative÷Positive=Negative

Don't Match!

Positive ÷ Negative=Negative

Don't Match!

Ex: $\frac{-12}{6} =$

Ex: $\frac{-8}{-2} =$

Ex: $-20 \div (-5) =$

Ex: $-\frac{3}{8} \div \frac{3}{10} =$

Ex: $16 \div (-4) =$

Ex: $-3 \div -9 =$

<u>Try These:</u> Use highlighters to make your socks.

$-35 \div 7 =$

$12 \div (-3) =$

$-18 \div (-6) =$

$-21 \div (-7) =$

$18 \div (-3) =$

$24 \div (-4) =$

$7 \div (-2) =$

$-4 \div (-8) =$

$-\frac{3}{4} \div \left(-\frac{3}{8}\right) =$

Finding the Mean:

Example: The table gives the daily minimum temperatures (in degrees Fahrenheit) in Barrow, Alaska, for the first 5 days of February 2004. Find the mean daily minimum temperature.

Day in February	1	2	3	4	5
Minimum Temperature (F°)	-21	-29	-39	-39	-22

Mean: $\frac{-21+(-29)+(-39)+(-39)+(-22)}{5} = \frac{-150}{5} = -30°\text{F}$

Try This:

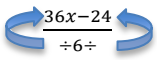
Find the mean maximum temperature (in degrees Fahrenheit) in Barrow, Alaska, for the first 5 days of February 2004.

Day in February	1	2	3	4	5
Maximum Temperature (F°)	-3	-20	-21	-22	-18

Simplifying an Expression (Division):

Example: $\frac{36x-24}{6} = \frac{1}{6}(36x-24) = 6x-4$

*Note: Each term in the numerator is divided by the denominator.



Try These:

$\frac{20x+15}{5}$ $\frac{12x-8}{-4}$ $\frac{-6y+18}{3}$ $\frac{-10z-20}{-5}$

$\frac{33x+15}{3}$ $\frac{20x-8}{-4}$ $\frac{-27y+9}{3}$ $\frac{-18z+30}{-6}$