2.4: Multiply Real Numbers / 2.6 Divide Real Numbers

Goals: *Add numbers with same signs

*Add numbers with different signs

Rules: $P \cdot P = P$

 $P \div P = P$

 $P\cdot N=N \qquad \quad N\cdot P=N$

 $P \div N = N$ $N \div P = N$

 $N \cdot N = P$

 $\mathbf{N} \div \mathbf{N} = \mathbf{P}$

Ex: -3(6)

Ex: 2(-4)(-3)

Ex: $-\frac{1}{2}(-4)(-3)$ Ex: -2(-7)

Ex: -0.5(-4)(-9) **Ex:** $-40 \div (-10)$

Ex: $-16 \div 4$

Ex: $36 \div (-12)$

Would the following answers be positive or negative?

Ex: (-2)(-6)(-8)(-4)

Ex: (-2)(6)(-8)(-4)

Is there a shortcut to determining if the final answer will be positive or negative?

Multiplicative Inverse:

Ex:
$$-20 \div \frac{5}{3}$$

Ex:
$$\frac{4}{3}(-3)(7)$$

Ex:
$$-\frac{3}{8} \div \left(-\frac{3}{10}\right)$$

Ex: In 1900 the elevation of Mono Lake, CA was about 6416 feet. From 1900 to 1950, the average rate of change in elevation was about -0.12 feet/year. From 1950 to 2000 the average rate of change was about -0.526 feet/year.

- a) Find the elevation in the year 1950.
- b) Find the elevation in the year 2000.

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

Day in Feb.	1	2	3	4	5
Min. Temp.	-21	-29	-39	-39	-22