BE-1A WEDNESDAY 10-18-06

WELCOME BACK! I HOPE YOU ARE WELL RESTED AND READY FOR THE FIRST DAY OF QUARTER 2!!

PLEASE DOUBLECHECK YOUR SUPPLIES AND HAVE EVERYTHING by MONDAY, 10-23-06.

1. $\frac{4}{11} + \frac{2}{3}$

2. $\frac{4}{11} - \frac{2}{3}$

3. $\frac{4}{11}\left(\frac{2}{3}\right)$

4. $\frac{4}{11} \div \frac{2}{3}$

REVIEW: Sign rules for +, −

① SAME sign ADD, keep same sign

Ex) $5+7=12$

$-5-7=-12$

$-5+(-7)=-12$

② different signs subtract, "biggest" wins

Ex) $5-7=-2$ (biggest ABSOLUTE VALUE!)

$-5+7=2$

③ taking away a negative is a positive

Ex) $5-(-7)=5+7=12$

$(+7)$

NEW: Sign rules for •, ÷

① SPDN "Same signs Positive"
"Different signs Negative"

Ex) $3\cdot 3=9$ $\quad \frac{9}{3}=3$ $\quad \frac{-9}{-3}=3$

$-3\cdot 3=-9$

$-3\cdot -3=9$ $\quad \frac{9}{-3}=-3$

ANOTHER WAY TO SHOW A POSITIVE TIMES A NEGATIVE IS NEGATIVE:

$$5(-3) = \begin{array}{r} -3 \\ -3 \\ -3 \\ -3 \\ \oplus\ -3 \\ \hline \boxed{-15} \end{array}$$

BE CAREFUL, WHAT IS THE CORRECT VALUE for EACH:

(A) $4-(5)$

(B) $4(-5)$

NO SYMBOL BETWEEN THE 4 AND PARENTHESES MEANS MULTIPLY. "IMPLIED MULTIPLICATION"

ANY SYMBOL BETWEEN THE NUMBER (OR VARIABLE) AND THE PARENTHESES MEANS THAT SYMBOL MUST TAKE PRIORITY.

Ch. 2-3 "Multiplying Rational Numbers"

Ex 1 Pg 79 $(-12)(-14)$

Ex 2 Pg 80 Simplify $4(-3y)-15y$

Ex 3 Pg 80 $\left(-\frac{3}{4}\right)\left(\frac{3}{8}\right)$

∴ Sign First, Then Do the Math!

Ex) $\left(\frac{3}{4}\right)^2 = \frac{3}{4}\cdot\frac{3}{4} = \boxed{\frac{9}{16}}$

$\left(-\frac{1}{2}\right)^3 = -\frac{1}{2}\cdot-\frac{1}{2}\cdot-\frac{1}{2} = \boxed{-\frac{1}{8}}$

(negative)$^{\text{odd}}$ stays negative

(negative)$^{\text{even}}$ is positive

Ex) $\left(-\frac{1}{3}\right)^2 = \left(-\frac{1}{3}\right)\left(-\frac{1}{3}\right) = \boxed{\frac{1}{9}}$

Reminder: Like Terms ⇒ same variables AND = variables have same exponents

Ex) $5xy^2 + 3xy + 2xy^2 + xy$

$= \boxed{7xy^2 + 4xy}$

Group Practice: Pg 81 #4-15

HW: Read Ch. 2-3