

BE-1A TUESDAY 10-2-07

① $-\frac{4}{11} + \frac{3}{5}$

② $-\frac{2}{5} + \frac{17}{20}$

③ $-\frac{4}{15} - \frac{3}{5}$

④ $-1 - 1 - 1 - 1 - 1 - 1$

⑤ $-6 - (-6)$

TAKE OUT HOMEWORK:

Pg. 76-77 #18-32 even, #40-50 even

Sign Rules for Mult./Dividing

• SPDN

Same Signs Positive, Different Signs Neg.

$$\text{Ex) } (-3)(-5) = 15$$

$$(-3)(5) = -15$$

$$\frac{-15}{-3} = 5$$

$$\frac{-15}{3} = \frac{15}{-3} = -5$$

Fraction Rules for Mult./Dividing

MULT. FRACTIONS $\Rightarrow$ $\frac{\text{Top} \cdot \text{Top}}{\text{Bottom} \cdot \text{Bottom}}$ Cross-cancel if you can

$$\text{Ex) } \frac{3}{4} \cdot \frac{2}{3} = \frac{6}{12} = \frac{1}{2}$$

or $\frac{\overset{1}{\cancel{3}}}{\underset{2}{\cancel{4}}} \cdot \frac{\overset{1}{\cancel{2}}}{\underset{1}{\cancel{3}}} = \frac{1}{2}$

2.
Fraction Division $\Rightarrow$ "Flip and Multiply"

$$\frac{\frac{3}{4}}{\frac{2}{3}} = \frac{3}{4} \cdot \frac{3}{2} = \frac{9}{8}$$

↑
"Flip" the fraction doing the dividing

Why it works:

$$\frac{\frac{3}{4}}{\frac{2}{3}} \cdot \frac{\frac{3}{2}}{\frac{3}{2}} = \frac{\frac{3}{4} \cdot \frac{3}{2}}{1} = \frac{9}{8}$$

Ex) $\frac{2}{5} \div 4$

$$\frac{\frac{2}{5}}{\frac{4}{1}} = \frac{2}{5} \cdot \frac{1}{4} = \frac{2}{20} = \frac{1}{10}$$

(or) $\frac{2}{5} \cdot \frac{1}{4_2} = \frac{1}{10}$

Ch. 2-3 Multiplying Rational Numbers

EXAMPLES

$$\textcircled{1A} \quad 4(-5)$$

$$\boxed{-20}$$

$$\textcircled{B} \quad (-12)(-14)$$

$$\boxed{168}$$

$$\textcircled{2} \quad \text{Simplify } 4(-3y) - 15y$$

$$-12y - 15y = \boxed{-27y}$$

$$\textcircled{3} \quad \left(-\frac{3}{4}\right)\left(\frac{3}{8}\right) = \boxed{-\frac{9}{32}}$$

$$\textcircled{4} \quad \text{EVALUATE } N^2\left(-\frac{5}{8}\right) \text{ if } N = -\frac{2}{5}$$

$$(\quad)^2\left(-\frac{5}{8}\right)$$

$$\left(-\frac{2}{5}\right)^2\left(-\frac{5}{8}\right)$$

$$\left(-\frac{2}{5}\right)\left(-\frac{2}{5}\right)\left(-\frac{5}{8}\right) = \boxed{-\frac{1}{10}}$$

4
2

Ch. 2-4 Dividing Rational Numbers

EXAMPLES

$$\textcircled{1} \textcircled{A} \quad -77 \div 11 = \boxed{-7}$$

$$\textcircled{6} \quad \frac{-51}{-3} = \boxed{17}$$

$$\textcircled{2} \quad \frac{-3(-12+8)}{7+(-5)} = \frac{-3(-4)}{2} = \frac{12}{2} = \boxed{6}$$

$$\textcircled{3} \textcircled{a} \quad 245.66 \div 14.2$$

$$\begin{array}{r} 0017.3 \\ 14.2 \overline{) 245.6600} \\ \underline{142} \\ 1036 \\ \underline{994} \\ 426 \\ \underline{426} \\ 0 \end{array}$$

$$\textcircled{6} \quad -\frac{2}{5} \div \frac{1}{4}$$

$$-\frac{2}{5} \cdot \frac{4}{1} = \boxed{-\frac{8}{5}}$$

HW:
Pg. 81 # 4-9
Pg 86 4-9