

2.16 MULTIPLYING / DIVIDING FRACTIONS

p. 45

REMEMBER:

$$(+)(+) = (+)$$

$$(-)(-) = (+)$$

} IF THE SIGNS ARE THE SAME, THE PRODUCT IS (+)

$$(+)(-) = (-)$$

$$(-)(+) = (-)$$

} IF THE SIGNS ARE DIFFERENT, THE PRODUCT IS (-)

$$\text{ex)} \left(\frac{-10}{9} \right) \left(\frac{-18}{5} \right)$$

• REDUCE FIRST

$$+ \frac{2 \cdot 2}{1 \cdot 1}$$

- DECIDE ON THE ANSWER'S SIGN
- MULT. NUMERATORS
- MULT. DENOMINATORS

$$= 4$$

$$\text{ex)} \left(-3\frac{4}{7} \right) \left(2\frac{4}{5} \right)$$

• CONVERT TO IMPROPER FRACTIONS

$$\left(-\frac{25}{7} \right) \left(\frac{14}{5} \right)$$

• REDUCE

$$- \frac{5 \cdot 2}{1 \cdot 1}$$

• DECIDE ON ANSWERS

5/5/1

• MUST. NUM.

• MUST. DEN.

$$= -10$$

TO DIVIDE FRACTIONS: "KISS & FLIP"

$$\text{ex) } \left(\frac{-4}{5} \right) \div \left(\frac{-6}{10} \right)$$

• CHANGE TO MULT.

BY "KISS & FLIP"

("KEEP CHANGE FLIP")

• REDUCE

$$\left(\frac{-4}{5} \right) \times \left(\frac{-10}{6} \right)$$

$$+ \frac{2 \cdot 2}{1 \cdot 3}$$

• SLEN

• DECIDE ON ANSWERS

• MULT. NUM.

• MULT. DENOM.

$$\frac{4}{3}$$

• "CLEAN UP"

– REDUCE IF NECESSARY

– PROPER FORM

$$1\frac{1}{3}$$

$$\text{ex) } \left(2\frac{3}{4} \right) \div \left(-4\frac{4}{10} \right)$$

- CHANGE TO IMPROPER

REACTIONS

$$\frac{11}{4} \div \left(-\frac{44}{10} \right)$$

- "KISS & FLIP"

$$\frac{11}{4} \times \left(-\frac{10}{44} \right)$$

- REDUCE

- DECIDE ON

ANSWER'S SIGN

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

- MULT. NUM..

- MULT. DENOM.

- "CLEAN-UP"

$$= \frac{5}{8}$$

p. 42 (RED) } #1-9N, #1-10A, #1-15E
p. 46 (BLACK) }