

BE-1A MONDAY 9-21-09

① $\frac{2}{3} \cdot 2$

② $\frac{\frac{2}{3}}{2}$

③ $5 \cdot \frac{3}{4}$

④ $\frac{\frac{5}{3}}{4}$

• Return/review graded HW5 & Quiz 4 (time permitting)

Adding or subtracting two numbers with the same sign:

$$+3 + 7 = ?$$

$$3 + 7 = 10$$

Same Sign Add, Keep Same Sign

$$-3 - 7 = ?$$

$$-3 - 7 = -10$$

Same Sign Add, Keep Same Sign

(EX) $-5 - 2 = ?$

$$-6 - 3 = ?$$

$$-6 + -5 = ?$$

$$-1 - 1 - 1 - 1 = ?$$

$$1 + 1 + 1 + 1 = ?$$

$$-12 - 4 - 2 = ?$$

$$-5 - 1 = ?$$

(*) SSA, KSS

Adding or subtracting two numbers with opposite signs:

$$+3 + -7 = ?$$

$$3 - 7 = -4$$

Different Signs Subtract, Biggest +
ONE WINS

$$+ -3 + 7 = ?$$

$$-3 + 7 = 4$$

Different Signs Subtract, Biggest Wins

$$\textcircled{\text{EX}} -5 + 2 = ?$$

$$-8 + 12 = ?$$

$$15 - 6 = ?$$

$$-15 + 6 = ?$$

$$10 - 10 = ?$$

$$-1 + 1 - 1 + 1 = ?$$

$$1 - 1 + 1 = ?$$



DSS, BOW

Special Cases: Subtracting A Negative

$$4 - (-8) = ?$$

$$4 \overset{+}{\cancel{-}(-8)} = 12$$

ⓔx $5 - (-6) = ?$

$$-4 - (-3) = ?$$

$$1 - (-1) = ?$$

$$5x - (-2x) = ?$$

For fractions to be "like" terms, they must have the same denominator.
(common) (bottom number)

ⓔx $\frac{1}{2} + \frac{1}{3}$

$$\frac{\quad}{6} + \frac{\quad}{6} = \frac{\quad}{6}$$

$$\frac{3}{6} + \frac{2}{6} = \boxed{\frac{5}{6}}$$

You can always multiply the two bottom numbers together, but use a smaller common denominator if you can find one.

(EX) $\frac{3}{4} + \frac{1}{6}$

you could use $4 \cdot 6 = 24$

try:

$1 \cdot 6 = 6$ NO

$2 \cdot 6 = 12$ YES

$3 \cdot 6 =$ NOT NEEDED

$4 \cdot 6 =$ NOT NEEDED

$\frac{9}{12} + \frac{2}{12} = \frac{11}{12}$

$\frac{9}{12} + \frac{2}{12} = \boxed{\frac{11}{12}}$

(EX) $\frac{2}{7} - \frac{3}{5}$

$\frac{10}{35} - \frac{21}{35} = \boxed{\frac{-11}{35}}$

$\frac{2}{7} \cdot \frac{5}{5}$

$\frac{3}{5} \cdot \frac{7}{7}$

Multiplying by 1 does not change the number, only its form. $\frac{2}{7} = \frac{10}{35}$

Practice: Pg 76 # 4 to 15

Homework: Pg 76 # 17-22
29-33