

BE-1A MONDAY 10-1-07

- ① Simplify $4\left(\frac{1}{2}x + 5\right) + 3x - 4$
- ② NAME THE SET: $\{1, 2, 3, \dots\}$
- ③ NAME THE independent variable:
 $\{(4, 2), (-2, 1), (0, 3)\}$
- ④ NAME THE QUADRANT EACH POINT is in.

↑
?

↑
?

↑
?
- ⑤ $9 \div 3 \cdot 1 + 6 = ?$

END OF QUARTER EXAMS ARE NEXT WEEK.

This coming SATURDAY (10-6-07) is the last SATURDAY OF THE QUARTER.

Ch. 2-2 Adding AND SUBTRACTING RATIONAL Number

$\frac{a}{b}$
fraction

$\{ \frac{a}{b} \text{ where } a, b \text{ are integers, } b \neq 0 \}$
OR $\{ \text{all terminating and repeating decimals} \}$

Sign Rules For +, -

- Same Signs Add, Keep the sign
 ex) $-3 - 6 = -9$
 ex) $3 + 6 = 9$
- Opposite Signs Subtract, "Biggest" Sign Wins
 ex) $-2 + 7 = 4$
 ex) $2 - 7 = -4$
- Special Case, "taking away a negative is a positive"

ex) $8 - (-3) = 8 \overset{+}{\cancel{-}} \overset{+}{\cancel{3}} = 11$

↗
circle the two
negatives and change
to a plus.

NOTE: $3 \overset{-}{+} (-8) = 3 - 8 = -5$



this is the preferred way to write it in Algebra, subtracting is the same as adding a negative, using ONE symbol is preferred.

EX 1
PG 73

Ⓐ $-3 + (-4)$

$-3 - 4 = \boxed{-7}$

Ⓑ $2.5 + (-3.5)$

$2.5 - 3.5$

$\boxed{-1.0}$

NOTE: when adding or subtracting decimals, line up on the decimal

$$\begin{array}{r} -3.5 \\ 2.5 \\ \hline -1.0 \end{array}$$

Ex 2
Pg 75

$$-11 + (-7)$$

$$-11 - 7 = \boxed{-18}$$

FRACTION RULES

+, - Common Denominator

• $\frac{\text{Top} \cdot \text{Top}}{\text{Bottom} \cdot \text{Bottom}}$ CANCEL or CROSS-CANCEL AS NEEDED

÷ Flip & Multiply

$$\text{Ex) } \frac{1}{2} + \frac{3}{7} = \frac{7}{14} + \frac{6}{14} = \boxed{\frac{13}{14}}$$

$$\text{Ex) } -\frac{1}{2} + \frac{3}{7} = -\frac{7}{14} + \frac{6}{14} = \boxed{-\frac{1}{14}}$$

$$\text{Ex) } \frac{1}{2} \cdot \frac{3}{7} = \boxed{\frac{3}{14}}$$

$$\text{Ex) } \frac{1}{2} \div \frac{3}{7} \quad \text{or} \quad \frac{\frac{1}{2}}{\frac{3}{7}}$$

$$\frac{1}{2} \cdot \frac{7}{3} = \boxed{\frac{7}{6}}$$

Why?

Adding or Subtracting Fractions, the
same sign rules apply

- SSA, KSS
- OSS, BSW
- SC, TAANIAP

Ex 2
Pg 74

⑥

$$\frac{7}{16} + \left(-\frac{3}{8}\right)$$

$$\frac{7}{16} - \frac{3}{8}$$

$$\frac{7}{16} - \frac{6}{16}$$

$$\frac{7}{16} - \frac{6}{16} = \boxed{\frac{1}{16}}$$

Ex 3
Pg 75

A stock price began AT \$17.82
AND ended AT \$15.36. Find the
change.

Now - beginning

$$15.36 - 17.82 \Rightarrow \ominus$$

$$\begin{array}{r} \text{SUBTRACT} \\ 17.82 \\ 15.36 \\ \hline - 2.46 \end{array}$$

↑
include
units

↑
Line up decimals when +, -

Practice: Pg 76 # 4-15
(group)

Homework Pg. 76-77

18-32 even
40-50 even