

Notes 4-2

Solving One-Step Equations
with Rational Numbers

Int 1

Unit 4

Instructions:

- 1) Circle the variable and set up your lines.
- 2) Use Inverse Operations on BOTH SIDES to get the variable alone.
- 3) Solve with the variable in your answer.
- 4) Remember you can plug your answer back into the original problem to check.

SOLVE WITH DECIMALS

$$1) \quad 4.5 = t + 2.5$$

$$\begin{array}{r} -2.5 \quad -2.5 \\ \hline 2 = t \end{array}$$

$$4) \quad -2.8p = -4.2$$

$$\begin{array}{r} -2.8 \quad -2.8 \\ \hline p = 1.5 \end{array} \quad -2.8(1.5) = -4.2$$

$$2) \quad 7.7 = y - 3.2$$

$$\begin{array}{r} +3.2 \quad +3.2 \\ \hline 10.9 = y \\ y = 10.9 \end{array}$$

$$5) \quad 8.7 = -k - 3.2$$

$$\begin{array}{r} -3.2 \quad -3.2 \\ \hline -27.84 = k \end{array}$$

$$3) \quad .25x = 16$$

$$\begin{array}{r} .25 \quad .25 \\ \hline x = 64 \end{array}$$

$$.25(64) = 16$$

✓

Name:

Period:

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SOLVE WITH FRACTIONS (Adding/Subtracting)

6)

$$\frac{1}{3} + (x) = 4$$

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

$$4 - \frac{1}{3} =$$

$$x = 3\frac{2}{3} \quad \frac{11}{3}$$

7)

$$(y) - \frac{3}{5} = 6\frac{1}{2}$$

$+\frac{3}{5}$ $+\frac{3}{5}$

$$y = 6\frac{1}{2} + \frac{3}{5} \cdot 2$$

$$y = 6\frac{5}{10} + \frac{6}{10} = 6\frac{11}{10}$$

8)

$$(x) + \frac{3}{8} = -\frac{11}{4}$$

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

$$x = -\frac{25}{8}$$

$$7\frac{1}{10} \quad -3\frac{1}{8}$$

SOLVE WITH FRACTIONS (Multiplying/Dividing)

HOW???

Multiply By its reciprocal!

9)

$$\frac{4}{3} \cdot \frac{3}{4} \cdot (b) = 9 \cdot \frac{4}{3}$$

$b = 12$

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10)

$$-\frac{8}{7} \cdot \frac{7}{8} \cdot (w) = -\frac{21}{64} \cdot \frac{8}{7}$$

$w = +\frac{3}{8}$

11)

* must change to improper!

$$-7\frac{1}{2} = 1\frac{7}{18} (y)$$

$-\frac{15}{2} = \frac{25}{18} (y)$

$$-\frac{27}{5} = y$$