

p48

Lesson #8

Copy this in your notebooks. Label it p.48

THIS IS ON COLORED PAPER BECAUSE
IT'S IMPORTANT

If you
forget what
to do
LOOK
HERE



Solving Equations STEPS TO FOLLOW



GOAL: Isolate the variable
(get x by itself)

- #1. Remove your brackets (* If you have brackets)
*The TRICK is in the arrows →
- #2. Write each numerator over its denominator
(if you have a denominator)
- #3. If you have a denominator, eliminate it
by MULTIPLYING EACH NUMERATOR
by what your common denominator
would be if you were looking for one.
(LCM - lessons 5 & 6) *After you multiply,
divide
- #4. Simplify each side of the equal sign,
if possible. ← move variables on the right to the left →
- #5. Move the term that isn't "stuck" to
your variable first. Remember what you
do to one side, you must do to the
other! Letters on the left. Numbers on the right.
- #6. Move the other term. Remember what
you do to one side you must do to the other

backside of your page 48

Try this question

* Follow the steps on p 48 (backside of this page)

$$-1(-2x-4) = \frac{3x+2}{2}$$

VERIFY

Now that you have finished,
Compare your answer with
mine

$$\begin{array}{c} \curvearrowright \quad \curvearrowright \\ -1(-2x-4) = \frac{3x+2}{2} \end{array}$$

#1. Get rid of
brackets

$$2x + 4 = \frac{3x+2}{2}$$

#2 Write each
numerator with
its denominator

$$2 \cdot 2x + 4 = \frac{3x}{2} + \frac{2}{2}$$

#3 Multiply each
numerator by
the number that
would be your
common denominator

$$4x + 8 = \frac{6x}{2} + \frac{4}{2}$$

DIVIDE

$$4x + 8 = \frac{3x+2}{2} \quad \#4. \text{ letters on left}$$

$$-3x$$

$$x + 8 = 2$$

$$-8 \quad -8$$

$$x = -6$$

verify

$$-1(-2x-4) \quad \frac{3x+2}{2}$$

$$-1(-2(-6)-4) \quad \frac{3(-6)+2}{2}$$

$$-1(12-4) \quad \frac{-18+2}{2}$$

$$-1(8) \quad \frac{-16}{2}$$

-8

$$-16$$

$$-8$$

Lesson #8 continued

Complete the following questions on a sheet of loose leaf.

1. Copy the question
2. Show all your work
3. Keep your = in a nice, straight line
4. Circle your final answer
5. Verify your answer.

When you have finished, send me your answers. (ie Email a pic of your answers & work on looseleaf) Thank you!

a) $\frac{x}{2} = \frac{5}{10}$

b) $\frac{x}{2} + 6 = -30$

c) $2(x-3) = 3(x+1)$

d) $\frac{x}{2} + \frac{1}{3} = 5$

e) $\frac{2(x+3)}{2} = 10$

f) $\frac{k}{3} - \frac{1}{2} = -1\frac{3}{4}$

g) $-1x = 12$

h) $-x = -15$

same
as
-1

