BE-1A MONDAY 11-26-07

① Simplify: $4(x+2)+3x$

② Simplify: $2x+3x^2-5x+4x^2$

③ Simplify: $\frac{8x+16}{2}$

SOLVE:

④ $\frac{2}{7}x = \frac{5}{4}$

- m/c Quizzes
- Review Graded QS + Homework

So far in Ch. 3 we have been solving "1 undo" and "2 undo" equations.

↑ single-step ↑ multi-step (multiple)

Lets look at a new type...

What is new about this equation?

$$-2 + 10p = 8p - 1$$

What is your goal?

Tip: when your variable, in this case p, is on both sides - your first step is to use an undo to get all the p's together

$$-2 + 10p = 8p - 1$$
$$-8p \quad -8p$$
$$-2 + 2p = -1$$
$$+2 \qquad +2$$
$$\frac{2p}{2} = \frac{1}{2}$$

$$\boxed{p = \frac{1}{2}}$$

Compare the two ways to get the p's together:

$-2 + 10p = 8p - 1$

$-8p \quad -8p$

$-2 + 2p = -1$

$+2 \qquad +2$

$\frac{2p}{2} = \frac{1}{2}$

$\boxed{p = \frac{1}{2}}$

$-2 + 10p = 8p - 1$

$-10p \quad -10p$

$-2 = -2p - 1$

$+1 \qquad +1$

$\frac{-1}{-2} = \frac{-2p}{-2}$

$\boxed{\frac{1}{2} = p}$

SHOULD GET SAME ANSWER IF YOU DO YOUR UNDO's correctly.

THIS WAS Ex 1 pg 149

Ch 3-5 "SOLVING EQUATIONS WITH THE VARIABLE ON EACH SIDE"

(Ex) $20c + 5 = 5c + 65$

If your equation has parentheses, get terms out of "parentheses jail" before combining like terms and starting "undos."

(Ex) $3(a-5) = -6$

$3(a-5) = -6$

$3a - 15 = -6$

$+15 \quad +15$

$\frac{3a}{3} = \frac{9}{3}$

$\boxed{a = 3}$ CK $3[(3)-5] \stackrel{?}{=} -6$

(Ex) $\frac{3}{8} - \frac{1}{4}t = \frac{1}{2}t - \frac{3}{4}$

↑ COULD START BY ADDING $\frac{1}{4}t$ to both SIDES

MULTIPLY BOTH SIDES BY 8

$8\left(\frac{3}{8} - \frac{1}{4}t\right) = \left(\frac{1}{2}t - \frac{3}{4}\right)8$

$3 - 2t = 4t - 6$

$+2t \quad +2t$

$3 = 6t - 6$

$+6 \quad +6$

$\frac{9}{6} = \frac{6t}{6}$

$\boxed{\frac{3}{2} = t}$

Homework: Page 152 # 16 to 21