

BE-1A TUESDAY 10-12-10

SOLVE:

① $x - 3 = -8$

② $-2x = 14$

③ $\frac{x}{3} = 5$

④ WHAT IS DIFFERENT ABOUT THE
FOLLOWING EQUATION FROM ANY WE
HAVE SOLVED SO FAR:

$$2x - 6 = 10$$

1
All of the equations we have
solved so far have been
"one-undo" or "single-step" eq's

$$2x - 6 = 10 \quad \text{"multi-undo"}$$

$$+ 6 \quad + 6$$

or
"multi-step"

TIP: ALWAYS DO
THE $\pm$ UNDO
BEFORE THE $\cdot, \div$
UNDO!

$$\frac{2x}{2} = \frac{16}{2}$$

$$\boxed{x = 8}$$

$$\underline{\underline{CK}} \quad 2(8) - 6 \stackrel{?}{=} 10$$

$$16 - 6 \stackrel{?}{=} 10 \quad \checkmark$$

Ch. 3-4 Solving Multi-Step Equations

↓
MORE THAN ONE UNDO

-
- Do the Add or subtract UNDO first
 - Follow THE GRE
 - Goal is STILL TO get "variable by itself"
-

Ex 2
pg 143

$$7m - 17 = 60 \Rightarrow \text{COMPLETE EQUATION}$$

$$+17 \quad +17 \Rightarrow \text{WHAT UNDO TO EACH SIDE}$$

$$\frac{7m}{7} = \frac{77}{7} \Rightarrow \text{COMPLETE EQUATION}$$

$$\Rightarrow \text{WHAT UNDO TO EACH SIDE}$$

$$\boxed{m = 11}$$

$\Rightarrow$ COMPLETE EQUATION

NOTE: THIS IS A
"2 UNDO" EQUATION

$$\underline{\underline{CK}} \quad 7(11) - 17 \stackrel{?}{=} 60$$

$$77 - 17 \stackrel{?}{=} 60 \checkmark$$

Ex 3
Pg 143

$$\frac{t}{8} + 21 = 14$$

$$\quad -21 \quad -21$$

$$\frac{t}{8} = -7$$

$$\cdot 8. \quad \frac{t}{8} = -7 \cdot 8$$

$$\boxed{t = -56}$$

$$\underline{\underline{CK}} \quad \frac{(-56)}{8} + 21 \stackrel{?}{=} 14$$

$$-7 + 21 \stackrel{?}{=} 14 \quad \checkmark$$

$$\underline{\underline{Ex 4}} \cdot \frac{p-15}{9} = -6 \cdot 9$$

$$\begin{array}{rcl} p - 15 & = & -54 \\ +15 & & +15 \end{array}$$

$$\boxed{p = -39}$$

PRACTICE, your turn:

$$\text{Solve: } 5x + 8 = -52$$

$$\quad \quad -8 \quad \quad -8$$

$$\frac{5x}{5} = \frac{-60}{5}$$

$$\boxed{x = -12}$$

$$\begin{aligned} \text{CK } 5(-12) + 8 &\stackrel{?}{=} -52 \\ -60 + 8 &\stackrel{?}{=} -52 \checkmark \end{aligned}$$

HOMEWORK: Pg. 145 # 7 to 11