

BE-1A MONDAY 11-13-06

- TAKE OUT WOODEN PENCILS
AND looseleaf ; textbook
for a "supply check"
- Keep your hands ; feet
inside the car AT ALL times
because today we ARE
finally going to solve EQUATIONS!

①

EQUATION A MATH EXPRESSION THAT
HAS AN EQUALS SIGN (=)

WHEN WRITING AN EQUATION FROM
A "WORD DESCRIPTION", do this:

① FIND THE WORD THAT WILL
GET REPLACED BY THE = sign.

EX) is, same as, equals, ...

② THEN WRITE THE MATH
EXPRESSION FOR EACH SIDE

EX 1 A - Pg 120

FIVE TIMES THE NUMBER a IS EQUAL TO THREE TIMES THE
SUM OF b
AND c

$$5a = 3(b+c)$$

LEFT SIDE RIGHT SIDE

EX 1 B

NINE times y subtracted from 95 equals 37

$$95 - 9y = 37$$

UNDO'S

$+$, $-$ UNDO EACH OTHER

$\cdot$, $\div$ UNDO EACH OTHER

START WITH X

RECALL

$$X = 1X$$

UNDO $X + 2$

$$X - 2$$

$$4X$$

$$\frac{X}{5}$$

SOLVE AN
Equation

FIND ALL OF THE VALUES OF
THE VARIABLE THAT MAKE A
TRUE EXPRESSION WHEN
SUBSTITUTED INTO THE ORIGINAL
EQUATION.

GOLDEN RULE OF EQUATIONS (G.R.E.)

WHATEVER YOU DO TO
ONE SIDE OF AN
EQUATION, DO TO THE
OTHER.

💡 YOUR GOAL IN SOLVING AN
EQUATION IS "TO GET THE VARIABLE
by itself."

💡 YOU CAN DO ANY UNDO, AS LONG
AS YOU FOLLOW THE G.R.E.

EX) $x + 3 = 6$

$-3 \quad -3$

$x = 3$

COMPLETE EQUATION

"WHAT YOU ARE DOING
TO EACH SIDE"

COMPLETE EQUATION

EX) $x - 8 = 12$

$+8 \quad +8$

$x = 20$

How to check?

EX 1 Pg 129

SOLVE

GOAL?

4

$$m - 48 = 29$$

$$+ 48 \quad + 48$$

$$m = 77$$

CK $m - 48 \stackrel{?}{=} 29$

$$(\quad) - 48 \stackrel{?}{=} 29$$

$$(77) - 48 \stackrel{?}{=} 29$$

$$29 \stackrel{?}{=} 29 \quad \checkmark$$

$$\begin{array}{r} 61 \\ 77 \\ -48 \\ \hline 29 \end{array}$$

EX 2

$$21 + f = -18$$

$$-21$$

$$-21$$

GOAL?

$$f = -39$$

CK $21 + f \stackrel{?}{=} -18$

$$21 + (-39) \stackrel{?}{=} -18$$

$$-18 \stackrel{?}{=} -18 \quad \checkmark$$

Ex 3 Pg 130

$$\begin{array}{r} 142 + d = 97 \\ -142 \quad \quad -142 \end{array}$$

(5.)

$$\begin{array}{r} 142 \\ (-) 97 \\ \hline 45 \end{array}$$

$$d = -45$$

CK $142 + (-45) \stackrel{?}{=} 97$

$$97 \stackrel{?}{=} 97 \checkmark$$

$$\begin{array}{r} 142 \\ (-) 45 \\ \hline 97 \end{array}$$

Ex 4

$$g + \frac{3}{4} = -\frac{1}{8}$$

$$\begin{array}{r} -\frac{3}{4} \quad -\frac{3}{4} \end{array}$$

$$g = -\frac{1}{8} - \frac{3}{4}$$

$$g = -\frac{1}{8} - \frac{6}{8}$$

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

CK $(-\frac{7}{8}) + \frac{3}{4} \stackrel{?}{=} -\frac{1}{8}$

$$-\frac{7}{8} + \frac{6}{8} = -\frac{1}{8} \checkmark$$

6

Practice: Pg 131

④ $t - 4 = -7$

⑤ $p + 19 = 6$

⑥ $15 + r = 71$

⑦ $104 = y - 67$

When finished,
change

$$x = y$$

to

$$y = \text{number}$$

⑩ twenty-one subtracted from a number is -8

HW: Read Ch 3-1 and 3-2

Pg 132 # 15-24 (include checks!)