

BE-1A

TUESDAY 9-5-06

① PAGE 57 OF textbook, Problems # 1 to ~~10~~ 8.

② $x = 3, t = 4, y = 2$

$xty^3 = ?$ 💡 USE WHAT?

③ Solve: Replacement Set = $\{4, 5, 6, 7, 8\}$
AND $x + 2 > 7$

💡 FTYBR.

<u>x</u>	<u>$x + 2 > 7$</u>	
4	$(4) + 2 > 7$	NO
5	$(5) + 2 > 7$	NO
6	$(6) + 2 > 7$	YES
7	$(7) + 2 > 7$	YES
8	$(8) + 2 > 7$	YES

Solution Set
 $\therefore \boxed{x = \{6, 7, 8\}}$

WHAT is $(4 + 5)$

WHAT is $(x + 5)$

WHAT is $3(4 + 5)$

WHAT is $3(x + 5)$

"PARENTHESES"
TAIL

HOW TO BREAK OUT?

LOOK AT $3(4 + 5) = 27$

TRY $3(4 + 5)$

$$12 + 15 = 27 \checkmark$$

THIS IS CALLED THE DISTRIBUTIVE PROPERTY
AND IS ONE OF THE MOST USED AND USEFUL
PROPERTIES IN ALGEBRA. WE CAN USE IT TO GET
UNLIKE TERMS OUT OF "PARENTHESES TAIL"

$$3(x + 5) = \boxed{3x + 15}$$

②

NOTE: WHEN you have "like terms" inside parentheses, just combine them (use PEMDAS) WITH NUMBERS

OTHERWISE, you must use THE DP

$$\text{EX) } 4(x+2) = 4(\overbrace{x+2}) = \boxed{4x+8}$$

$$6(4+x) = 6(\overbrace{4+x}) = \boxed{24+6x}$$

$$3(x-5) = 3(\overbrace{x-5}) = \boxed{3x-15}$$

$$2(7-x) = 2(\overbrace{7-x}) = \boxed{14-2x}$$

$$1(x+5) = (x+5) \text{ MIP}$$

$$\frac{1}{2}(4x+10) = \frac{1}{2}(\overbrace{4x+10}) = 2x+5$$

$$(8x+3)5 = (\overbrace{8x+3})5 = \boxed{40x+15}$$

$$5(2x+3y-6) =$$

$$5(\overbrace{2x+3y-6}) = 10x+15y-30$$

LIKE TERMS

TERMS THAT YOU CAN COMBINE, that is, add or subtract with each other.

To be "like terms" they must be the SAME variable AND THE VARIABLES MUST HAVE THE SAME EXPOONENT.

NEVER COMBINE NUMBERS AND VARIABLES

$$3x + 2x - x = 3x' + 2x' - 1x' \\ = \boxed{4x}$$

$$3x + 2x^2 - x = \boxed{2x + 2x^2}$$

$$3x + 6 + 2x - 1 = \boxed{5x + 5}$$

Ex 5 Pg. 28

$$\textcircled{a} \quad 5(g-9) = \boxed{5g-45}$$

$$\textcircled{b} \quad 3(2x^2+4x-1) = \boxed{6x^2+12x-3}$$

You can use the DP to simplify some "Number" problems

Ex 4 Pg 27

$$\textcircled{a} \quad 15.99 = 15 \overbrace{(100-1)} = 1500 - 15 = \boxed{1485}$$

$$\textcircled{b} \quad 35(2\frac{1}{5}) = 35 \overbrace{(2+\frac{1}{5})} = 70 + 7 = \boxed{77}$$

3x
 ↓
 COEFFICIENT

G.P.

Use the DP, combine like terms if you can:

$$\textcircled{1} \quad 8(2x + 6)$$

$$\textcircled{2} \quad 10(12 - 15x)$$

$$\textcircled{3} \quad 5(4x + 3y + 2)$$

$$\textcircled{4} \quad 2(5x + 8) + 4x + 3$$

$$\textcircled{5} \quad 2(5x^2 + 8) + 4x + 3$$

HW: • Read Ch 1-5

• Read Study Guide AT END OF
Ch. 1, Pgs 57-60 Ch 1-1 to 1-5

HOMEWORK

CHAPTER 1 Study Guide on
Page 57 to 59 of textbook

For Ch. 1-1 to 1-4, FIRST
copy (NEATLY) the Concept Summary
then do the following problems:

Ch. 1-1 Pg 57 Copy Concept Summary
Pg 58 Do # 12, 14, 16

Ch 1-2 Pg 58 Copy Concept Summary
Pg 58 Do # 22, 24, 26, 28,
30, 32

Ch 1-3 Pg 59 Copy Concept Summary
Pg 59 Do # 46

Ch 1-4 Pg 59 Copy Concept Summary
Do # 48