

BE-1A | WEDNESDAY 10-24-07

① Find the mean, median, mode:
 $\{12, 5, 60, 18, 5\}$

② Name the sets:

- Ⓐ $\{1, 2, 3, \dots\}$ Ⓓ $\{\text{Repeating and terminating decimals}\}$
Ⓑ $\{0, 1, 2, 3, \dots\}$ Ⓔ $\{\text{Non-terminating, Non-Repeating decimals}\}$
Ⓒ $\{\dots, -3, -2, -1, 0, 1, 2, 3, \dots\}$ Ⓕ $\{\text{Ⓓ, Ⓔ}\}$

③ Write an algebraic expression for:
"the sum of three times a and the square of b "

$$\underbrace{\quad}_{+} \quad \underbrace{\quad}_{3a} \quad \underbrace{\quad}_{b^2}$$
$$\boxed{3a + b^2}$$

EQUATION MATH EXPRESSION WITH
AN EQUALS SIGN

💡 WHEN "WRITING" EQUATIONS, BEGIN
WITH THE $=$ SIGN, THEN WORK
ON THE LEFT SIDE AND RIGHT SIDE
ONE AT A TIME.

SOME "KEY" WORDS THAT USUALLY
ARE REPLACED BY $=$

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> • is • equals (obviously) • is equal to | } | <ul style="list-style-type: none"> • is the same as • is identical to |
|--|---|---|
-

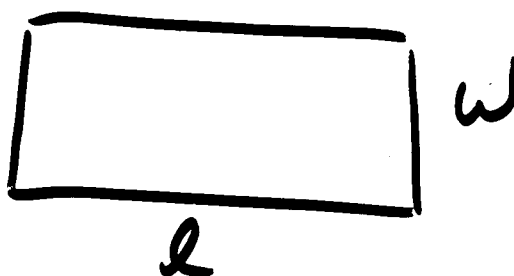
EX 1
p 120

Ⓐ Five times the number a is equal
to three times the sum of b and c

⑥ Nine times y subtracted from 95 equals 37

EX3
PS122

The perimeter of a rectangle equals two times the length plus two times the width.



💡 Long side is usually l

DONE Ch. 3-1 Writing Equations —

$$\begin{array}{ccc}
 & \uparrow & \\
 P & = & 2l + 2w \\
 \downarrow & & \\
 \text{LEFT} & & \text{RIGHT} \\
 \text{SIDE} & & \text{SIDE}
 \end{array}$$

Undo ADDITION?

$$x + 2$$

Subtraction - 2

$$x$$

Undo multiplication?

$$3x$$

Division: $\frac{3x}{3} = 1x = x$

Addition and Subtraction

UNDO EACH OTHER

MULTIPLICATION AND DIVISION

UNDO EACH OTHER

Goal in solving an equation:
 "Get the variable by itself"

Ex) $x + 6 = 15$

$$\boxed{x = 9}$$

OR Ex) $15 = x + 6$

$$\boxed{9 = x}$$

By the "Symmetric POE" it doesn't matter which side the variable ends up on since $x = 9$ Prefer is the same as $9 = x$

How do you know you solved it? If you substitute your answer into the original equation and it is true.

$$x + 6 \stackrel{?}{=} 15$$

$$(9) + 6 \stackrel{?}{=} 15 \quad \checkmark$$

WHAT IS THE SECRET TO SOLVING
EQUATIONS?

YOU CAN DO ANY UNDO YOU
WANT TO GET THE VARIABLE
BY ITSELF, AS LONG AS YOU FOLLOW
THE GRE = GOLDEN RULE OF EQUATIONS



"WHATEVER YOU DO TO ONE
SIDE, DO TO THE OTHER"

EX) $x + 12 = 18$

EX) $x - 9 = 4$

EX) $m - 48 = 29$ (EX 1 PG 129)

A complete example plus check:

$$\begin{array}{r} \text{ex) } h - 12 = -27 \\ \quad +12 \quad +12 \end{array}$$

$$\boxed{h = -15}$$

$$\underline{\underline{\text{CK}}} \quad h - 12 \stackrel{?}{=} -27$$

$$(\quad) - 12 \stackrel{?}{=} -27$$

$$(-15) - 12 \stackrel{?}{=} -27 \quad \checkmark$$

Homework: • Read Ch 3-1 and 3-2
• Pg 131 # 4 to 7, 10