

BE-1A TUESDAY 8-28-2007

- ① Write, using set notation, the set of odd integers starting at 1.
- ② True or false:
- | | | |
|------------------------|--|-----------------------------------|
| Ⓐ $1.5 < 2$ | | Ⓓ $\frac{1}{2} \leq \frac{6}{12}$ |
| Ⓑ $1 = 1.0$ | | |
| Ⓒ $\overline{.6} > .6$ | | |
- ③ Each item or member of a set is also called an _____ of the set.
- ④ Just using mental math, can this number be divided by 3 or 9 evenly? How do you know?
- 421314

Take out HW $\Rightarrow$ What will you do to get better in Algebra?

1.
Suppose $X = \{1, 5, 8\}$

And you want to evaluate

$$2x + 1$$

What tool do you use?

↑
get it, WHAT tool?

Right, a + table:

x	$2x + 1$
1	$2(\) + 1 =$
5	$2(\) + 1 =$
8	$2(\) + 1 =$

x	$2x + 1$
1	$2(1) + 1 = 2 + 1 = 3$
5	$2(5) + 1 = 10 + 1 = 11$
8	$2(8) + 1 = 16 + 1 = 17$

28 a

How would you substitute if you had THIS SET AND this EQUATION?

$$N = \{3, 4, 5, 6, 7\} = \text{REPLACE-MENT SET}$$

$$6N + 7 = 37$$

MAKE A "T" table

N	$6N + 7 = 37$
3	$6(3) + 7 \stackrel{?}{=} 18 + 7 = 25$ FALSE
4	$6(4) + 7 \stackrel{?}{=} 24 + 7 = 31$ FALSE
5	$6(5) + 7 \stackrel{?}{=} 30 + 7 = 37$ TRUE
6	$6(6) + 7 \stackrel{?}{=} 36 + 7 = 42$ FALSE
7	$6(7) + 7 \stackrel{?}{=} 42 + 7 = 49$ FALSE

EX1
Pg 16

SOLUTION SET = $\{5\}$

REPLACEMENT SET is $\{3, 4, 5, 6, 7\}$
(SUBSTITUTION)

EQUATION is $5(x+2) = 40$

FIND THE SOLUTION SET

Steps: MAKE A "+" table, PUT THE REPLACEMENT SET ON THE LEFT AND THE EQUATION (WITH PARENTHESES) ON the right. If ANY NUMBERS IN THE REPLACEMENT SET MAKES A TRUE EQUATION, they ARE PART OF THE SOLUTION SET.

SOME, ONE, NONE, OR ALL OF THE elements of the replacement set may be in the solution set.

x	$5(x+2) = 40$	
3	$5[(3)+2] \stackrel{?}{=} 25$	X
4	$5[(4)+2] \stackrel{?}{=} 30$	X
5	$5[(5)+2] \stackrel{?}{=} 35$	X
6	$5[(6)+2] \stackrel{?}{=} 40$	✓
7	$5[(7)+2] \stackrel{?}{=} 45$	X

SOLUTION SET is $\{6\}$

EX①b on Page 17

- REPLACEMENT SET is $\{7, 8, 9, 10, 11, 12\}$
 - INEQUALITY is $18 - y < 10$
 - FIND THE SOLUTION SET
-

EX 3 Pg 17

THE SOLUTION SET FOR AN EQUATION
will often be only 1 number.

THE SOLUTION SET FOR AN INEQUALITY
will often be a lot of numbers.

Practice $\Rightarrow$ Pg 18 # 4, 10

Homework $\Rightarrow$ Pg 19 # 14, 15, 16, 37, 38