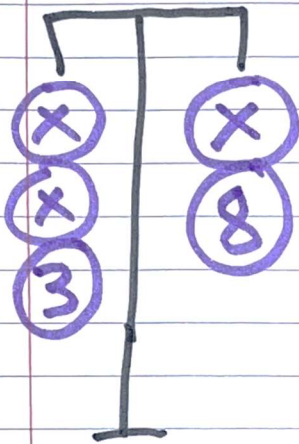


Lesson 4-5 \rightarrow ONE Solution
 INFINITE Solutions
 NO Solutions



$$2x + 3 = x + 8$$

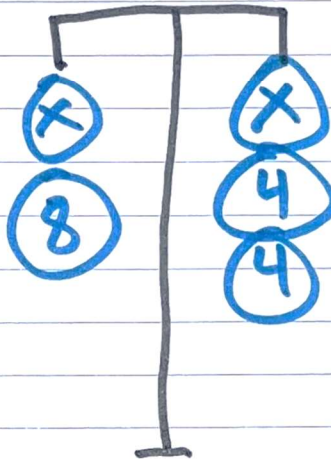
$$-x \quad -x$$

$$x + 3 = 8$$

$$-3 \quad -3$$

$$x = 5$$

ONE
SOLUTION



$$x + 8 = x + 8$$

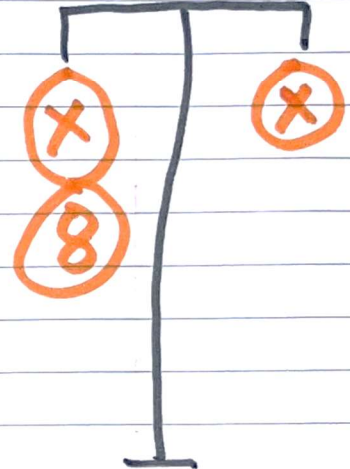
SAME!!

$$x + 8 = x + 8$$

$$-x \quad -x$$

$$8 = 8$$

INFINITE
SOLUTIONS



$$x + 8 = x$$

$$-x \quad -x$$

$$8 = 0$$

NONSENSE!!

NO
SOLUTIONS

Here's the Rule:

→ different X's on either side of equals sign

ONE Solution

$$4x + 1 = 3x - 5$$

$$x + 7 = 20$$

$$8x = 3x$$

→ same X's and

same constants (numbers)

INFINITE Solutions

$$4x + 1 = 4x + 1$$

→ same X's and

different constants (numbers)

NO Solutions

$$4x + 1 = 4x - 5$$

How many solutions?

$$x + 5 = 5$$

(i)
One
Solution

(ii)
infinite
Solution

(iii)
No
Solution

↑
Correct! Different X's!
X=0 is ONE Solution