

## Homework 11/18

	Expression	Equation	Inequality
1) Contains an equal sign		✓	
2) Cannot be 'solved'	✓		
3) <del><math>3x+6</math></del>		✓	
4) <del><math>3x+6=14</math></del>		✓	
5) Has multiple solutions			✓
6) <del><math>20 &gt; x</math></del>			✓
7) Can contain numbers	✓	✓	✓
8) A mathematical sentence		✓	
9) <del><math>10^3 + 9 + 2^6 \times 6^1</math></del>	✓		
10) <del><math>\frac{3}{4} = 0.75</math></del>	✓	✓	✓
11) Can contain variables	✓	✓	✓
12) Can be compared to a scale			✓
13) A mathematical phrase	✓		
14) <del><math>2 \leq x + 4</math></del>			✓
15) <del><math>x + 4</math></del>	✓		

## Homework 11/18

	Exp.	Eq.	Ineq.
12) Can be compared to a scale			
13) A mathematical phrase			
14) $x \geq 9$			
15) <del><math>x + 8 \leq 37 - 2</math></del>			
16) Like a balanced scale			✓
17) <del><math>x + 9 &gt; 12</math></del>			✓
18) <del><math>7 - 1 = 6</math></del>			✓
19) $7 + 1 \geq 8$		$x + 9 \geq 4$	✓
20) Can contain operation symbols (+, -, x, ÷)			✓
21) <del><math>\frac{3}{4} + 7(\underline{x}) + 18 = 4</math></del>			✓
22) <del><math>5 - x = 0</math></del>		$x + 2 = 18$	✓
23) <del><math>\underline{14}</math></del>			✓
24) Usually has one solution			✓
25) Like an unbalanced scale			✓

 $14 \stackrel{?}{=} 14$  Identify Solution Sets

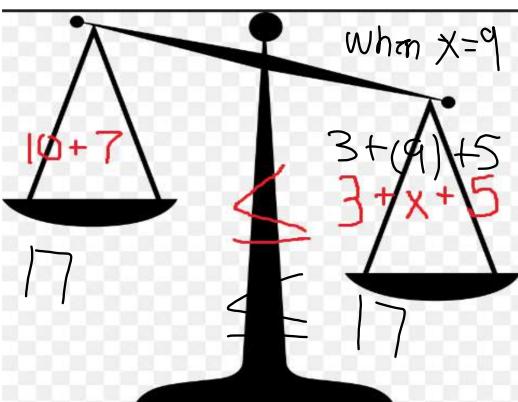
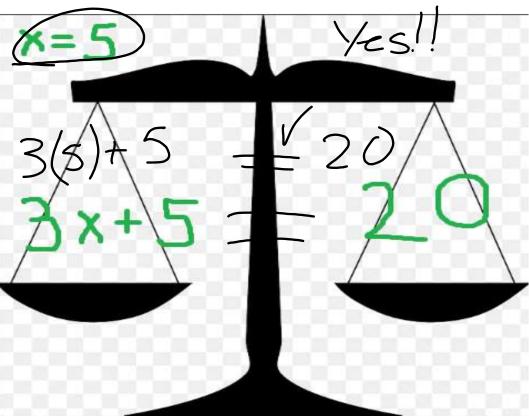
With algebraic equation or inequality can we determine if a given value is a solution? "Does it make the statement true?"

$$9+5 \stackrel{?}{=} 3x+5 \stackrel{?}{=} 14 \quad \text{when } x=3$$

$$3(3)+5$$

What is the next step after identifying Solutions????

Solving Equations





Is  $w+8+6w-3 \leq 5$ , when  $w=0$  ??

Does  $\underline{79-8*j} = \underline{34+j}$ , when  $j=5$  ???

$$\begin{aligned} 79 - 8(5) &\stackrel{?}{=} 34 + (5) \\ 79 - 40 & \quad 39 \\ 39 & \stackrel{?}{=} 39 \\ \text{S!} & \quad \text{!!} \end{aligned}$$

Solving Equations  
(Keeping the scale balanced)

$$\begin{aligned} \star g + 1 &= 44 \\ g + \underline{1} &= 44 - 1 \\ g &= 43 \end{aligned}$$