



- \*20 questions
- \*Calculators allowed
- \*Show all work/steps- use separate paper
- \*Recommend time frame 30min -45min

### Concept of Equations

1. True or False? All equations must contain an = symbol.
2. Define the solution to an equation in your own words.
3. When solving equations you are allowed to add, subtract, multiply or divide both sides of an equation by any number?

### Solving Equations

4. Solve  $-4x = -12$
5. Solve  $\frac{1}{3}y = 9$
6. Determine if  $-5$  is the solution to the following equation:  $-x - 5 = -10$
7. Solve  $3(w - 1) = 15$
8. Solve  $8t + 9(t + 2) = -12$
9. Determine if  $y = 4$  is a solution to the following equation:  $-3y + 2(y + 3) = y - 4$
10. Solve  $-5(3w + 1) = 4(w - 2)$
11. Solve  $7z - 9z + 3(z - 9) = 10z + 1$
12. Solve  $5x + 10 - x + 14 = -2x + 20$
13. Solve  $4r + 2(2r - 3) - r = 3(r - 3)$

14. Solve for h:  $3xh = 9$
15. Solve for y:  $4x + 6y = 12$
16. Solve for x:  $y = -3x + 7$
17. Solve  $3.4(1.9 - p) + 1.02p = 6.1(p + 3)$  \* use a calculator to help—show all your work.
18. Solve  $\frac{3}{4} + x = 3x - \frac{1}{3}$
19. Solve  $\frac{1}{3}y = -5y + 1/4$
20. Determine if  $x = -2$  is a solution to  $x^2 = 4$