

NAME: \_\_\_\_\_

Hour: \_\_\_\_\_

## ***Solving Equations Study Guide***

Solve. Show ALL your work.

1.  $2 + 6z = 5 + 3z$

2.  $2(h - 8) - h = h - 16$

3.  $7 = \frac{x}{4}$

4.  $-\frac{z}{5} + 4 = 3$

5.  $-2(5v + 3) = 5v + 24$

6. When Betty attempts to solve the equation  $4x + 32 = 8(\frac{1}{2}x - 4)$ , her last step shows  $32 = -32$ . Is Betty correct? Why or why not? Show your work and Explain.

7.  $3w + 4 - w = 2(w - 2) + w$

8.  $7y + 9 = 7y - 6$

9.  $3p - 1 = 5(p - 1) - 2(7 - 2p)$

10.  $4.7x + 3.8 = 13.2$

11.  $-4x - 9 = -5 - 6x$

12.  $3(y - 5) + 2 = 5$

13.  $4(y + 2) = 32$

14. Tomas has saved \$204 to purchase a new smartphone that costs \$500. He intends to earn the rest of the money he needs by doing odd jobs at \$8 per hour.

Solve the equation  $8h + 204 = 500$  to find how many hours,  $h$ , Tomas will have to work in order to have enough money to purchase the phone.

15.  $-6y + 14 + 4y = 32$