

Name _____

ANSWER KEY

Date _____

ALGEBRA PRACTICE: MULTI-STEP EQUATIONS

**Directions:** Solve each equation.

1. $7j + 5 = 2j - 10 + 8j$

$$j = 5$$

2. $36 = 3(d + 6) - 12d$

$$d = -2$$

3. $-5(6 - 3g) = 7g + 18$

$$g = 6$$

4. $-2(5h + 4) = 18 - 8h$

$$h = -13$$

5. $3m + 10 = -8 - 5m - 14$

$$m = -4$$

6. $-a - 7(2a + 10) = -220$

$$a = 10$$

7. $-2(3w + 4) + 6w = -3w + 16$

$$w = 8$$

8. $-12 + 15v - 35 = -4(3 - 5v)$

$$v = -7$$

9. $-3r + 6(3r - 8) = 11r - 4$

$$r = 11$$

10. $5(-n + 8) - 6 = 20 - 3n$

$$n = 7$$

11. $2 - 9p = 6(8 - p) - 19$

$$p = -9$$

12. $-4(7 - 2b) = 2(-b + 6) + 8b$

$$b = 20$$