

Simplifying and Solving Equations (G)

Name: _____

Date: _____

Determine the value of the unknown in each equation.

1. $-7p - 3 = -8 + 5p$

11. $5 + 2g = -7g - 3$

2. $4 - 9v = 9 + v$

12. $-3(d - 3) + 2d = 1$

3. $3 = -3(1 - 2k) + 8k$

13. $-6c + 8 = -8c - 7$

4. $3 - b + 5 = -5b - 1$

14. $2 - 9w = -3w - 9$

5. $-6 + j = 3j + 4$

15. $-8 + 6f = -8f + 4$

6. $1 = -8(1 - s) + 7s$

16. $-4(2 - m) = -4m - 7$

7. $1 - 2h = -7(h - 1) + 1$

17. $q + 3 = -q + 1 - 5q$

8. $n = 3(2n - 1) + n - 1$

18. $3(-3 + 2y) = 4 + 9y$

9. $-6 + 8z = 5 - 7z$

19. $t + 5 = 5(1 + t) + 4$

10. $3(1 - 3r) = 2(4 - r)$

20. $-7 + 8a = 9(1 - a)$

Simplifying and Solving Equations (G) Answers

Name: _____

Date: _____

Determine the value of the unknown in each equation.

1. $-7p - 3 = -8 + 5p$

$$p = \frac{5}{12}$$

11. $5 + 2g = -7g - 3$

$$g = -\frac{8}{9}$$

2. $4 - 9v = 9 + v$

$$v = -\frac{1}{2}$$

12. $-3(d - 3) + 2d = 1$

$$d = 8$$

3. $3 = -3(1 - 2k) + 8k$

$$k = \frac{3}{7}$$

13. $-6c + 8 = -8c - 7$

$$c = -7\frac{1}{2}$$

4. $3 - b + 5 = -5b - 1$

$$b = -2\frac{1}{4}$$

14. $2 - 9w = -3w - 9$

$$w = 1\frac{5}{6}$$

5. $-6 + j = 3j + 4$

$$j = -5$$

15. $-8 + 6f = -8f + 4$

$$f = \frac{6}{7}$$

6. $1 = -8(1 - s) + 7s$

$$s = \frac{3}{5}$$

16. $-4(2 - m) = -4m - 7$

$$m = \frac{1}{8}$$

7. $1 - 2h = -7(h - 1) + 1$

$$h = 1\frac{2}{5}$$

17. $q + 3 = -q + 1 - 5q$

$$q = -\frac{2}{7}$$

8. $n = 3(2n - 1) + n - 1$

$$n = \frac{2}{3}$$

18. $3(-3 + 2y) = 4 + 9y$

$$y = -4\frac{1}{3}$$

9. $-6 + 8z = 5 - 7z$

$$z = \frac{11}{15}$$

19. $t + 5 = 5(1 + t) + 4$

$$t = -1$$

10. $3(1 - 3r) = 2(4 - r)$

$$r = -\frac{5}{7}$$

20. $-7 + 8a = 9(1 - a)$

$$a = \frac{16}{17}$$