

Simplifying and Solving Equations (H)

Name: _____

Date: _____

Determine the value of the unknown in each equation.

1. $-7 - 6t = -4 + t$

11. $-2(g - 3) + 1 = -7g - 4$

2. $2x - 1 = 8 - 7x$

12. $-2(1 - 4q) = -7q - 5$

3. $v - 6 = -5(v + 1) - 3v$

13. $-3(1 + m) + m = 2m - 3$

4. $8(h + 1) + h = 4h + 5$

14. $-9a + 3 = 9a - 9$

5. $2(f + 3) + 1 = -4f - 7$

15. $-4(1 - w) + 3w = -3w + 2$

6. $-b + 3 = -2b - 7$

16. $4(1 - r) + 9 = 4r$

7. $-1 + 3s = 4 - 2s$

17. $-2(2 + k) = -5 - 3k$

8. $-5 + 6c = -4c - 8$

18. $2(3p + 2) = 2p + 9$

9. $-1 - y = -4 + y$

19. $3(2 - j) + 4 = -5j$

10. $5z = -5(z + 1) - z + 1$

20. $-2(d + 3) = 7d - 3$

Simplifying and Solving Equations (H) Answers

Name: _____

Date: _____

Determine the value of the unknown in each equation.

1. $-7 - 6t = -4 + t$
 $t = -\frac{3}{7}$

11. $-2(g - 3) + 1 = -7g - 4$
 $g = -2\frac{1}{5}$

2. $2x - 1 = 8 - 7x$
 $x = 1$

12. $-2(1 - 4q) = -7q - 5$
 $q = -\frac{1}{5}$

3. $v - 6 = -5(v + 1) - 3v$
 $v = \frac{1}{9}$

13. $-3(1 + m) + m = 2m - 3$
 $m = 0$

4. $8(h + 1) + h = 4h + 5$
 $h = -\frac{3}{5}$

14. $-9a + 3 = 9a - 9$
 $a = \frac{2}{3}$

5. $2(f + 3) + 1 = -4f - 7$
 $f = -2\frac{1}{3}$

15. $-4(1 - w) + 3w = -3w + 2$
 $w = \frac{3}{5}$

6. $-b + 3 = -2b - 7$
 $b = -10$

16. $4(1 - r) + 9 = 4r$
 $r = 1\frac{5}{8}$

7. $-1 + 3s = 4 - 2s$
 $s = 1$

17. $-2(2 + k) = -5 - 3k$
 $k = -1$

8. $-5 + 6c = -4c - 8$
 $c = -\frac{3}{10}$

18. $2(3p + 2) = 2p + 9$
 $p = 1\frac{1}{4}$

9. $-1 - y = -4 + y$
 $y = 1\frac{1}{2}$

19. $3(2 - j) + 4 = -5j$
 $j = -5$

10. $5z = -5(z + 1) - z + 1$
 $z = -4$

20. $-2(d + 3) = 7d - 3$
 $d = -\frac{1}{3}$