

## Simplifying and Solving Equations (C)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Determine the value of the unknown in each equation.

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

11.  $9 + 4t = -3(1 - 2t)$

2.  $-3z - 1 = 1 - 7z$

12.  $-2(n + 4) - 2 = 9n$

3.  $w - 5 = 8w + 5$

13.  $-8 + 6m = -6m + 8$

4.  $-5f - 8 = 2(3f + 2)$

14.  $6x - 6 = 9x - 3$

5.  $6g + 5 = -2(1 + 2g)$

15.  $-9j - 1 = 9j - 5$

6.  $5r = -3(r + 3) - 7$

16.  $5s + 3 = -s - 4$

7.  $-7q + 8 = -8 + 3q$

17.  $-h = -3(3h + 1) + 1$

8.  $-4p - 2 = 6p + 1$

18.  $-6(1 - v) = 5(1 - v)$

9.  $-5 + 8a = -4 + 7a$

19.  $-7 - 5d = 7 - 9d$

10.  $5k = -2(1 + 4k) - 7$

20.  $-6y = -5(1 - y) - 5$

# Simplifying and Solving Equations (C) Answers

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Determine the value of the unknown in each equation.

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

$$b = -1\frac{3}{11}$$

11.  $9 + 4t = -3(1 - 2t)$

$$t = 6$$

2.  $-3z - 1 = 1 - 7z$

$$z = \frac{1}{2}$$

12.  $-2(n + 4) - 2 = 9n$

$$n = -\frac{10}{11}$$

3.  $w - 5 = 8w + 5$

$$w = -1\frac{3}{7}$$

13.  $-8 + 6m = -6m + 8$

$$m = 1\frac{1}{3}$$

4.  $-5f - 8 = 2(3f + 2)$

$$f = -1\frac{1}{11}$$

14.  $6x - 6 = 9x - 3$

$$x = -1$$

5.  $6g + 5 = -2(1 + 2g)$

$$g = -\frac{7}{10}$$

15.  $-9j - 1 = 9j - 5$

$$j = \frac{2}{9}$$

6.  $5r = -3(r + 3) - 7$

$$r = -2$$

16.  $5s + 3 = -s - 4$

$$s = -1\frac{1}{6}$$

7.  $-7q + 8 = -8 + 3q$

$$q = 1\frac{3}{5}$$

17.  $-h = -3(3h + 1) + 1$

$$h = -\frac{1}{4}$$

8.  $-4p - 2 = 6p + 1$

$$p = -\frac{3}{10}$$

18.  $-6(1 - v) = 5(1 - v)$

$$v = 1$$

9.  $-5 + 8a = -4 + 7a$

$$a = 1$$

19.  $-7 - 5d = 7 - 9d$

$$d = 3\frac{1}{2}$$

10.  $5k = -2(1 + 4k) - 7$

$$k = -\frac{9}{13}$$

20.  $-6y = -5(1 - y) - 5$

$$y = \frac{10}{11}$$