## Simplifying and Solving Equations (A)

Name:

Date:

Determine the value of the unknown in each equation.

1. 
$$2(3-h)-6=-5h$$

11. 
$$2(3x-2)+9=-5x$$

2. 
$$7 + 9d = 7d + 3$$

12. 
$$3(1+p) = -5(p+1)$$

3. 
$$-2(4+3y) = -2(4+y)$$
 13.  $3(1-3g) = -7+g$ 

13. 
$$3(1-3g) = -7 + g$$

4. 
$$-7 + 4c = 7c + 6$$

14. 
$$1 + 2b = 4b + 9$$

5. 
$$5(1+s) = -9s + 6$$

15. 
$$2z + 6 = 3z + 1$$

6. 
$$3 + v = 2(2v - 1)$$

16. 
$$5a - 2 = -9a + 8$$

7. 
$$-2 - 4w = 7w - 8$$

17. 
$$6t - 5 = -9t - 9$$

8. 
$$-6(1-m) = 9-2m$$

18. 
$$-1 + 3f = -7 - 6f$$

9. 
$$-2q-3=-2(2q+1)$$

19. 
$$2 + r = 7 + 6r$$

10. 
$$6n + 7 = 2n + 5$$

20. 
$$-6k + 1 = -2 + 7k$$

## Simplifying and Solving Equations (A) Answers

Name:

Date:

Determine the value of the unknown in each equation.

1. 
$$2(3-h)-6=-5h$$
  
 $h=0$ 

11. 
$$2(3x-2) + 9 = -5x$$
  
 $x = -\frac{5}{11}$ 

2. 
$$7 + 9d = 7d + 3$$
  
 $d = -2$ 

12. 
$$3(1+p) = -5(p+1)$$
  
 $p = -1$ 

3. 
$$-2(4+3y) = -2(4+y)$$
  
 $y = 0$ 

13. 
$$3(1-3g) = -7 + g$$
  
 $g = 1$ 

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

14. 
$$1 + 2b = 4b + 9$$
  
 $b = -4$ 

5. 
$$5(1+s) = -9s + 6$$
  
 $s = \frac{1}{14}$ 

15. 
$$2z + 6 = 3z + 1$$
  
 $z = 5$ 

6. 
$$3 + v = 2(2v - 1)$$
  
 $v = 1\frac{2}{3}$ 

16. 
$$5a - 2 = -9a + 8$$
  
 $a = \frac{5}{7}$ 

7. 
$$-2 - 4w = 7w - 8$$
  
 $w = \frac{6}{11}$ 

17. 
$$6t - 5 = -9t - 9$$
  
 $t = -\frac{4}{15}$ 

8. 
$$-6(1-m) = 9 - 2m$$
  
 $m = 1\frac{7}{8}$ 

18. 
$$-1 + 3f = -7 - 6f$$
  
 $f = -\frac{2}{3}$ 

9. 
$$-2q - 3 = -2(2q + 1)$$
  
 $q = \frac{1}{2}$ 

19. 
$$2 + r = 7 + 6r$$
  
 $r = -1$ 

10. 
$$6n + 7 = 2n + 5$$
  
 $n = -\frac{1}{2}$ 

20. 
$$-6k + 1 = -2 + 7k$$
  
 $k = \frac{3}{13}$