## Worksheet 2.R: Equations Review | Chapter 2

**Solve each equation. Check your solution.** (See Lesson 1) Learning Goal: I can solve equations with rational coefficients. (8.EE.7a, 7b)

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

1. 
$$-24 = -\frac{6}{7}p$$
 2.  $\frac{2}{3}a = 12$ 

3. 
$$1\frac{7}{8}y = 4\frac{1}{2}$$
 4.  $10.8 = 0.9n$ 

**Solve each two-step equation.** (See Lesson 2) Learning Goal: I can solve two-step equations. (8.EE.7a, 7b)

5. 
$$2x + 3 = 7$$
 6.  $3x + 2 = 20$ 

7. 
$$-1 = \frac{1}{2}a + 9$$
  
8.  $\frac{n}{-3} - 2 = -18$ 

## \_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_ Name: \_\_\_\_ Worksheet 2.R: Equations Review | Chapter 2

**Solve each equation.** (See Lesson 4)

Learning Goal: I can solve equations with variables on each side of the equal sign. (8.EE.7a, 7b)

9. 8 + x = 3x10. 3x + 6 = 6x

11. 
$$3x + 3 = x - 5$$
 12.  $2x + 5 = 4x - 1$ 

Write an equation to find the value of *x* so that each pair of polygons has the same perimeter. Then solve. (See Lesson 4)

13.



**Solve each equation.** (See Lesson 5) Learning Goal: I can solve equations with multiple steps. (8.EE.7a, 7b)

14. 
$$9(j-4) = 81$$
 15.  $-3(9+x) = 33$ 

17. 2(10 + t) = 4t - 216. 5(a-7) = 25

Solve each absolute value equation. (See Lesson 6)

Learning Goal: I can solve absolute value equations. (8.EE.7c)

18. 
$$|-4w+2| = 14$$
  
19.  $\left|\frac{3}{4}a-3\right| = 9$ 

20. 
$$|-4d+6| = 18$$
 21.  $|x-6| = 11$ 

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For each of the following problems, define your variable. Then write and solve an equation to determine the answer. (See Lessons 3 and 4)

Learning Goal: I can write and solve multi-step equations. (8.EE.7a, 7b)

22. Hannah joined a dance team. She had to buy a new pair of shoes for \$55, and each month of dance classes costs \$35. If she spent a total of \$265 at the dance studio, how many months of classes did she pay for?

23. Matilda loves reading so much that she has to restrain herself. She wants to read a book that will take about 20 hours to read. She will only let herself read for four hours at a time. She has already read for 8 hours. How many more reading sessions (of four hours each) **REMAIN?** 

24. Morgan is four years older than twice the age of Chad. If Morgan is 56, how old is Chad?