

Algebra I

Worksheet 24

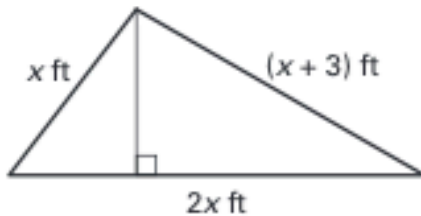
Name _____

Solve the equation.

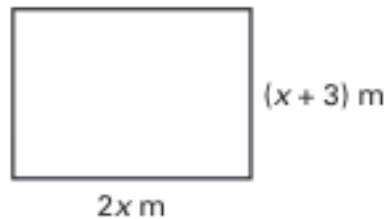
- $16x - 15 - 9x = 13$
- $15m + 4 - 9m = -32$
- $3b - 9 - 8b = 11$
- $-31 = 8 - 6p - 7p$
- $9 + 4(x + 1) = 25$
- $7(d - 5) + 12 = 5$
- $10a + 5(a - 3) = 15$
- $19a - 3(a - 6) = 66$
- $\frac{1}{4}(x - 8) = 7$
- $\frac{1}{3}(d + 9) = -12$
- $\frac{3}{4}(n + 3) = 9$
- $-\frac{5}{2}(w - 1) = 15$
- $6.4 + 2.1(z - 2) = 8.5$
- $4.5 - 1.5(6m + 2) = 6$
- $15 = 4.3n - 2.1(n - 4)$

Find the value of x for the triangle or rectangle.

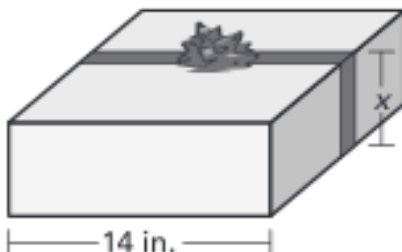
16. Perimeter = 23 feet



17. Perimeter = 24 meters



18. **Wrapping a Package** It takes 70 inches of ribbon to make a bow and wrap the ribbon around a box. The bow takes 32 inches of ribbon. The width of the box is 14 inches. What is the height of the box?



- 19. Vacation** You are driving to a vacation spot that is 1500 miles away. Including rest stops, it takes you 42 hours to get to the vacation spot. You estimate that you drove at an average speed of 50 miles per hour. How many hours were you *not* driving?
- 20. Moving** You helped a friend move a short distance recently. The friend rented a truck for \$15 an hour and rented a dolly for \$5. Your friend paid a total of \$80 for the rental. For how long did your friend rent the truck?
- 21. Painting** You and your friend are painting the walls in your apartment. You estimate that there is 1000 square feet of space to be painted. You paint at a rate of 4 square feet per minute and your friend paints at a rate of 3 square feet per minute. Your friend shows up to help you paint 45 minutes after you have already started painting.
- Write an equation that gives the total number of square feet y as a function of the number of minutes x it takes to paint all of the walls.
 - How long will it take you and your friend to finish painting? Round your answer to the nearest minute.