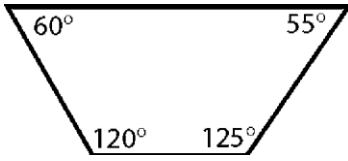
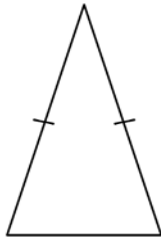


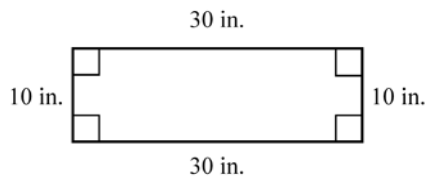
1. Name the polygon, and tell whether it is a regular polygon.



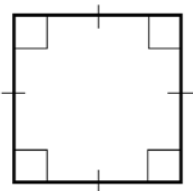
2. Classify the triangle according to its sides and angles.



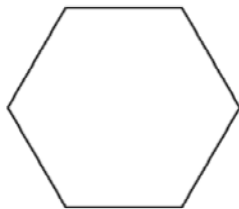
3. Give all of the names that apply to the quadrilateral.



4. Give all of the names that apply to the quadrilateral.



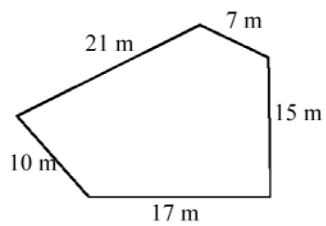
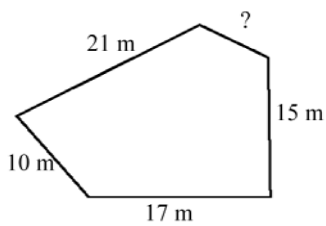
5. Divide the polygon into triangles to find the sum of its angle measures.



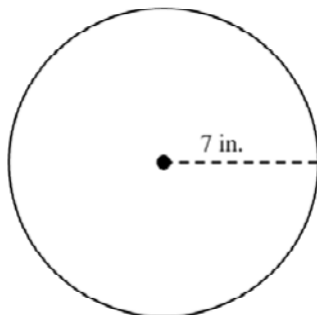
6. Name the congruent figures in the picture below.



7. Determine the missing measure in the set of congruent polygons.

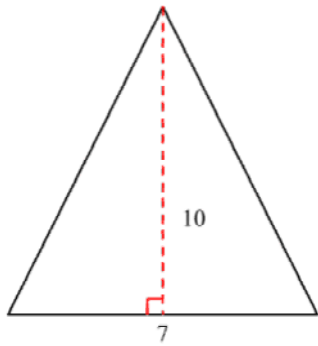


8. Find the circumference of the circle below to the nearest tenth. Use 3.14 for π .

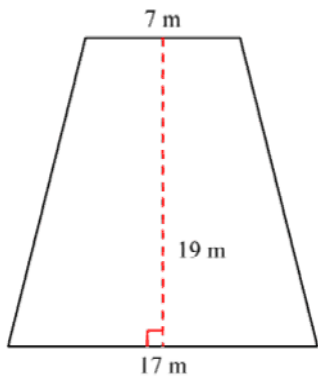


9. Olivia is planning on making a circular garden. If the diameter of the garden is 77 yards, what is its circumference? Use 3.14 for π .

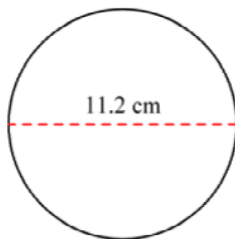
10. Find the area of the triangle.



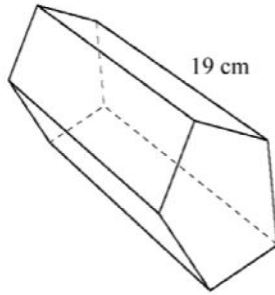
11. Find the area of the trapezoid.



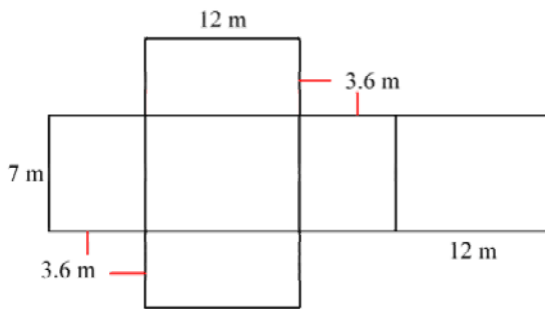
12. Find the area of the circle to the nearest tenth. Use 3.14 for π .



13. Find the volume of the prism to the nearest tenth if the area of the base is 48.91 square cm.



14. Determine the surface area of the prism formed by the following net.



For each case described below, determine how likely the event is to occur.

15. Suppose you flip a coin. What is the likelihood the coin will land heads up?
16. Three parts are available in the school play. Four students try out for these three parts. The director of the play fills all the parts. How likely is it that any one student who tried out will be in the school play?
17. During the summer, your friend has swimming lessons every Tuesday and Thursday morning at the neighborhood pool. How likely is it that you'll see your friend at the pool on Tuesday morning during the summer?
18. Your CD player is set up to play songs at random from the compact disc. The CD in your player has 10 songs. When you press play, what is the likelihood the first song you hear will be your favorite song on the CD?

Bonita is in a science class that has surprise quizzes given at random during the year. In the last 17 days of science class, Bonita had 1 surprise quiz.

19. What is the experimental probability Bonita will have a science quiz tomorrow?

A carnival has a duck-pond booth where you win a small, medium, or large prize if you select a specially marked plastic duck as the ducks float by. There are a total of 61 plastic ducks floating in the pond. There are 7 ducks marked as large-prize winners, 9 ducks marked as medium-prize winners, and 21 ducks marked as small-prize winners.

20. What is the theoretical probability, expressed as a percent, of winning a medium prize at the duck pond?
21. What is the theoretical probability, expressed as a percent, of winning any type of prize at the duck pond?

22. For Tuesday's speech class, 3 students are assigned to give presentations. How many different ways can the teacher order the student presentations?

23. A compact disk jukebox has 2 rock CDs, 5 country CDs, 7 R&B CDs, and 6 rap CDs. The jukebox randomly selects a CD to play. What are the odds the jukebox will not choose a rock CD?

24. Four sisters bought a present for their grandfather that cost each sister \$8.00. They received a 20% discount.

How much was the original price of the gift? *Decide whether each set of events below is independent or dependent.*

25. A bag contains 4 marbles. You draw a red marble, put it back in the bag, and then draw a blue marble.

a. independent events b. dependent events

26. The sophomore students have large lockers that line the school's southern hallway in a single row. A group of 4 friends agreed to choose lockers next to each other. How many different ways can the students choose adjacent lockers?

27. An amusement park has two types of season passes. Plan 1 costs a one-time fee of \$137.00 for admission plus \$10.00 every trip for parking. Plan 2 costs a one-time fee of \$48.00 for parking plus \$27.00 every trip for admission. At about how many days are plan 1 and plan 2 equal in value?

28. Graph the inequality.

$$b \geq 1.6$$

29. Solve. Then graph the solution set on a number line.

$$w - 5 < 1.5$$

30. Trish spent \$13.25 on supplies to make lemonade to sell on her sidewalk. At least how many glasses of lemonade must she sell at \$0.36 per glass to make a profit?

31. Find the mean, median, mode, and range of the following values: 17, 7, 11, 13, 2, 12

32. Express 3^3 as a number.

33. Ben visits the park every 2 days and goes to the library every 5 days. If Ben gets to do both of these today, how many days will pass before Ben gets to do them both on the same day again?

- a. It will be 20 days.
- b. It will be 7 days.
- c. It will be 10 days.
- d. It will be 3 days.

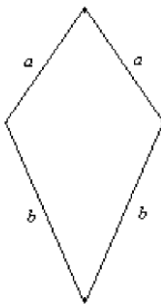
34. Midori cleans the hamster cage every 7 days, brushes the dog every 9 days, and cleans the frog aquarium every 6 days. If Midori does all three today, how many days will pass before Midori takes care of all three of these pets on the same day again?

- a. It will be 9 days.
- b. It will be 63 days.
- c. It will be 126 days.
- d. It will be 42 days.

Evaluate each expression for the given value of the variable.

35. $p - 14$ for $p = 38$

36. Write an expression for the perimeter of the kite shown. Combine like terms in the expression.



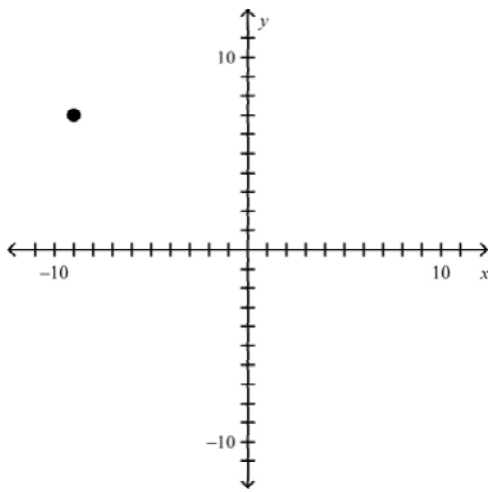
- a. $2a + 2b$
- b. $a^2 + b^2$
- c. $(a + 2) + (a + 2)$
- d. $a + a + b + b$

37. What is the solution for $29 = k - 9$?

38. Ana wants to grow a certain number of sunflower plants this year. Ana has 71 seeds, which is 50 more than the number needed. Does Ana want to grow 22 sunflowers, 21 sunflowers, 121 sunflowers, or 31 sunflowers this year?

39. Write the integers 4, -6, 6, -5, 9, and 2 in order from least to greatest, and then plot each of them on a number line.

40. Identify the quadrant that contains the point $(-9, 7)$.



41. Evaluate $p - q$ for the given values.

$$p = 2, q = 20$$

42. The temperature on the ground during a plane's takeoff was -7°F . At 38,000 feet in the air, the temperature outside the plane was -29°F . Find the difference between these two temperatures.

43. Find the quotient.

$$-36 \div (-4)$$

Graph each number on a number line.

44. Graph $-1/2$ on a number line

45 . Graph -1.25 on a number line

46. Which is a characteristic of a rational number?

47. Write the decimal -11.04 as a mixed number in simplest form.

48. Which decimal is less than 3.19 ?

49. A length of rope 4.12 feet long is cut into pieces 2.06 feet long. About how many pieces would there be? Use estimation to determine your answer.

50. Multiply. Estimate to check whether the answer is reasonable.

$$-4.148 \cdot 11.509$$

51. A box contains 10 books, and each book weighs, on average, 2.3 pounds. How much does the entire box weigh?

52. Divide. Estimate to check whether the answer is reasonable.

$$306 \div 3.4$$

53. Solve the following.

$$2.02w = -3.636$$

54.

Kristi had $\$7.00$ when she went to the store. When she got back, she had $\$2.36$. How much did she spend?

55. Gravity on Mars is about 0.377 times gravity on Earth. If an object weights 7.123 kg on Mars, how much does it weigh on Earth? Round your answer to the nearest thousandth.