

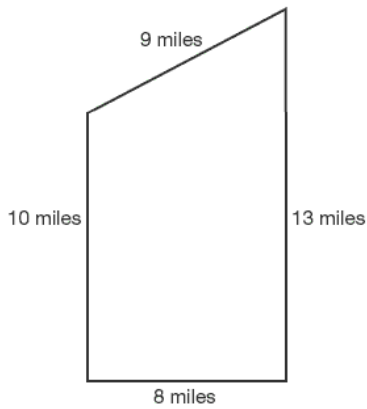
Geometry Word Problems

Name: _____

The geometry problems in this set involve lines, angles, triangles, rectangles, squares, and circles. You will learn how to find length, perimeter, area, circumference, and volume, and how you can apply geometry to everyday problems.

- A water sprinkler sprays in a circular pattern a distance of 10 ft. What is the circumference of the spray? ($\pi = 3.14$)
a. 31.4 ft b. 314 ft c. 62.8 ft d. 628 ft
- If a triangular sail has a vertical height of 83 ft and horizontal length of 40 ft, what is the area of the sail?
a. 1,660 ft² b. 1,155 ft² c. 201 ft² d. 3,320 ft²
- What is the volume of a ball whose radius is 4 inches? Round to the nearest inch. ($\pi = 3.14$)
a. 201 in³ b. 268 in³ c. 804 in³ d. 33 in³
- If a tabletop has a diameter of 42 in, what is its surface area to the nearest inch? ($\pi = 3.14$)
a. 1,384 in² b. 1,319 in² c. 1,385 in² d. 5,539 in²
- An orange has a radius of 1.5 inches. Find the volume of one orange. ($\pi = 3.14$)
a. 9.42 in³ b. 113.04 in³ c. 28.26 in³ d. 14.13 in³
- A fire and rescue squad places a 15 ft ladder against a burning building. If the ladder is 9 ft from the base of the building, how far up the building will the ladder reach?
a. 8 ft b. 10 ft c. 12 ft d. 14 ft
- Safe deposit boxes are rented at the bank. The dimensions of a box are 22 in by 5 in by 5 in. What is the volume of the box?
a. 220 in³ b. 550 in³ c. 490 in³ d. 360 in³
- **How many degrees does a minute hand move in 25 minutes?
a. 25° b. 150° c. 60° d. 175°
- Two planes leave the airport at the same time. Minutes later, plane A is 70 miles due north of the airport and plane B is 168 miles due east of the airport. How far apart are the two airplanes?
a. 182 miles b. 119 miles c. 163.8 miles d. 238 miles
- If the area of a small pizza is 78.5 in², what size pizza box would best fit the small pizza? (Note: Pizza boxes are measured according to the length of one side.)
a. 12 in b. 11 in c. 9 in d. 10 in
- A rectangular field is to be fenced in completely. The width is 28 yd and the total area is 1,960 yd². What is the length of the field?
a. 1,932 yd b. 70 yd c. 31 yd d. 473 yd

12. Stuckeyburg is a small town in rural America. Use the map to approximate the area of the town.



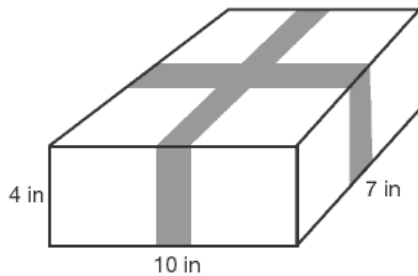
- b. 104 miles²
- c. 93.5 miles²
- d. 92 miles²

a. 40 miles²

13. A circular print is being matted in a square frame. If the frame is 18 in by 18 in, and the radius of the print is 7 in, what is the area of the matting? ($\pi = 3.14$)

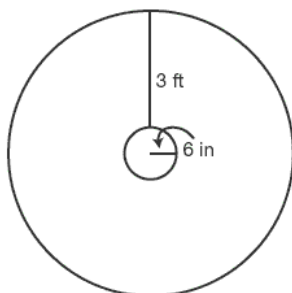
- a. 477.86 in²
- b. 170.14 in²
- c. 280.04 in²
- d. 288 in²

14. **Ribbon is wrapped around a rectangular box that is 10 in by 8 in by 4 in. Using the illustration provided, determine how much ribbon is needed to wrap the box. Assume the amount of ribbon does not include a knot or bow.



- a. 50 in
- b. 42 in
- c. 22 in
- d. 280 in

15. *Pat is making a Christmas tree skirt. She needs to know how much fabric to buy. Using the illustration provided, determine the area of the skirt to the nearest foot.



- a. 37.7 ft²
- b. 27 ft²
- c. 75 ft²
- d. 38 ft²