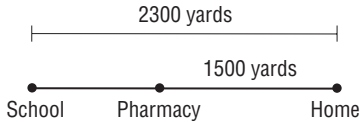


1-2 Word Problem Practice

Line Segments and Distance

- 1. WALKING** Marshall lives 2300 yards from school and 1500 yards from the pharmacy. The school, pharmacy, and his home are all collinear, as shown in the figure.



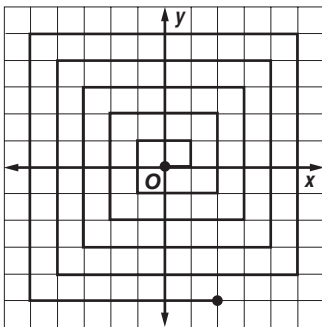
What is the total distance from the pharmacy to the school?

800 yd

- 2. RAILROADS** A straight railroad track is being built to connect two cities. The measured distance of the track between the two cities is 160.5 miles. A mailstop is 28.5 miles from the first city. How far is the mailstop from the second city?

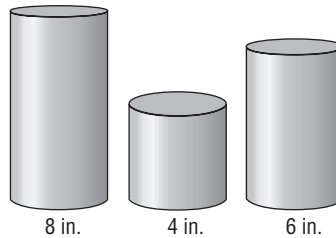
132 miles

- 3. SPIRALS** Caroline traces out the spiral shown in the figure. The spiral begins at the origin. What is the shortest distance between Caroline's starting point and her ending point?



$\sqrt{29}$ or approximately 5.39 units

- 4. BUILDING BLOCKS** Lucy's younger brother has three wooden cylinders. They have heights 8 inches, 4 inches, and 6 inches and can be stacked one on top of the other.



- a. If all three cylinders are stacked one on top of the other, how high will the resulting column be? Does it matter in what order the cylinders are stacked?

18 in. high. No, the order does not matter.

- b. What are all the possible heights of columns that can be built by stacking some or all of these cylinders?

10 in., 12 in., 14 in., 18 in.

- 5. WASHINGTON, D.C.** The United States Capitol is located 800 meters south and 2300 meters to the east of the White House. If the locations were placed on a coordinate grid, the White House would be at the origin. What is the distance between the Capitol and the White House? Round your answer to the nearest meter.

2435 m