Name _____ Date _____ Class _____

**1.** Triangle *ABC* is a right triangle.
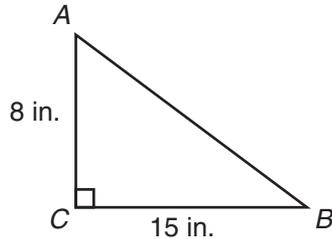


What is the length of $\overline{AB}$ ?

**A.** 12.7 inches

**B.** 15 inches

**C.** 17 inches

**D.** 23 inches

**2.** Triangle *PQR* is a right triangle.



What is the length of $\overline{PQ}$ ?

**F.** 37.6 inches

**G.** 34 inches

**H.** 30 inches

**I.** 18 inches

**3.** Jake's house is 5 miles due north of Sarah's house and 8 miles due west of Mary's house. What is the approximate straight-line distance from Sarah's house to Mary's house?

**A.** 6.2 miles

**B.** 8.0 miles

**C.** 9.4 miles

**D.** 13.0 miles

**4.** Use the Pythagorean Theorem. Which figure is a right triangle?

**F.**



**G.**



**H.**



**I.**



**5.** The size of a television screen is often described by its diagonal measurement. What is the diagonal measurement of a television whose screen measures 20.8 inches wide by 15.6 inches tall?

**A.** 36 inches

**B.** 26 inches
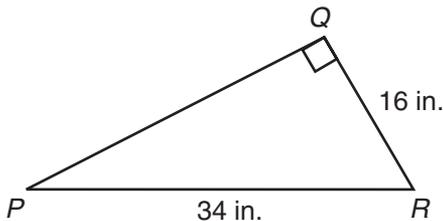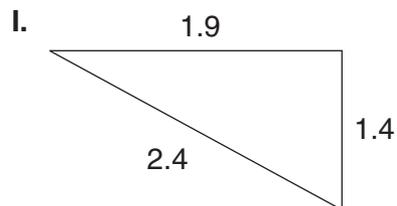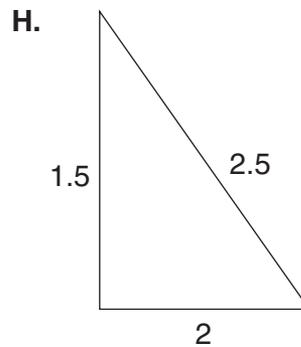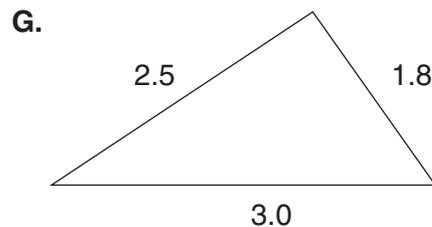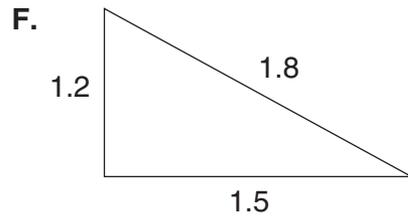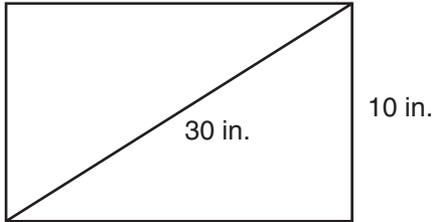
**C.** 18 inches

**D.** 14 inches

**Holt McDougal Math**

## Focus on Sunshine State Standards: Benchmark Tests

**GRADE 10**

### *MA.912.G.5.1 Benchmark Pre-Test (Gridded Response)*

**Use the Gridded Response Answer Sheet.**

**6.** The diagonal of a rectangular picture is 30 inches. The width of the picture is 10 inches.



10 in.

30 in.

To the nearest tenth, what is the length in inches of the picture?

**7.** Tara is putting a 150-centimeter beanpole in her garden, as shown in the drawing below. There are 6 strings of equal length coming from the top of the pole to the ground. Tara will plant seeds where each string is staked to the ground and the bean plants will grow up each string. Rounding **up** to the nearest centimeter, how many centimeters of string does she need for her beanpole?



120 cm
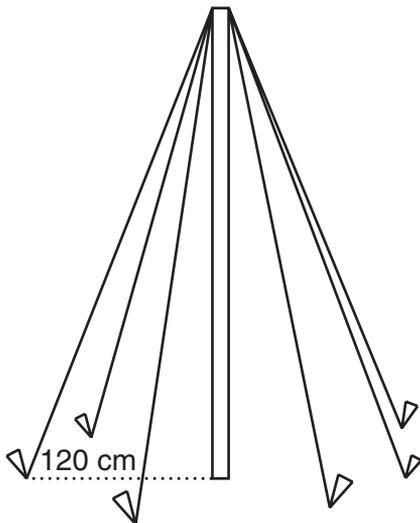
**8.** An 18-foot ladder leans against a vertical wall of a building. The bottom of the ladder is 8.5 feet from the base of the building.



18 ft

8.5 ft
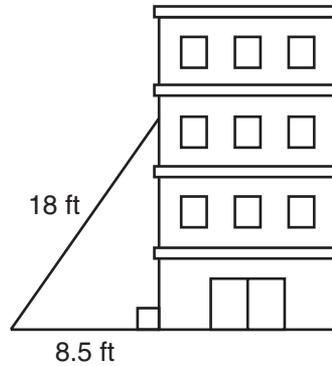
To the nearest tenth, how many feet up the wall of the building is the top of the ladder?

**9.** A mailman travels from his home to the Post Office and then to the Government Building as shown in the figure.



Home

25 mi

Government Building

9 mi
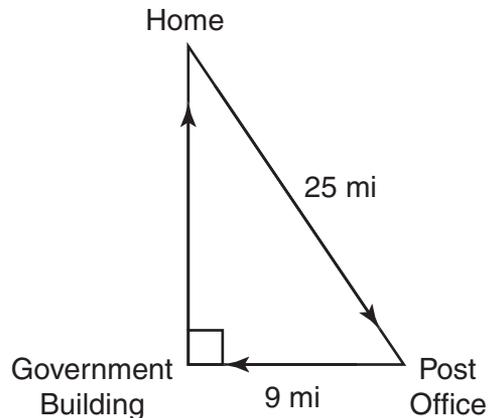
Post Office

If he travels straight back home from the Government Building, about how many miles shorter is this trip than the one from his home to the Government Building via the Post Office? (Round to the nearest tenth of a mile.)

**Holt McDougal Math**