

Algebra I EOC Practice #22

SPI 3102.4.2: Solve contextual problems using the Pythagorean Theorem.

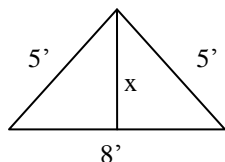
1. Joe plays third base, and Billy plays first base for their baseball team. If Joe and Bill are both standing on their respective bases, how long is a throw from Joe to Bill? A baseball diamond is a square with 90 feet between each of the bases.

A. 360 feet
B. 127.28 feet
C. 180.56 feet
D. 90 feet

2. In order to go to school each day, Julie walks about 3 miles west from her home on Patriot Avenue, then she walks south along Jefferson Street to the front of her school. She knows that the shortest distance from her home to the front of the school is about 9 miles (as the crow flies). How far does she walk along Jefferson Street each school day?

A. 3.2 miles
B. 6 miles
C. 8.5 miles
D. 9.7 miles

3. Oscar's doghouse is shaped like a tent. The slanted sides are both 5 feet long, and the bottom of the house is 8 feet across. What is the height of the doghouse, in feet, at its tallest point?

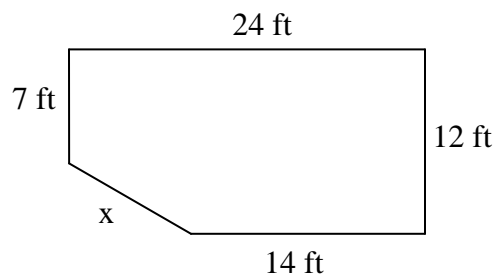


A. 3 feet
B. 4 feet
C. 5 feet
D. 6 feet

4. David was locked out of his house, but he noticed that there was an open window on the second floor, which is 25 feet above ground level. David borrowed a ladder from one of his neighbors. Since there is a shrub along the edge of the house, David will have to place the base of the ladder 10 feet from the house. What length ladder must David have in order to reach the window?

A. 17 feet
B. 23 feet
C. 27 feet
D. 33 feet

5. The diagram below shows the dimensions of Joe's flower garden. What is the dimension, in feet (ft), represented by x?



A. 5.92 feet
B. 8.62 feet
C. 10.35 feet
D. 11.18 feet