

Name: _____

Pythagorean Theorem Word Problems

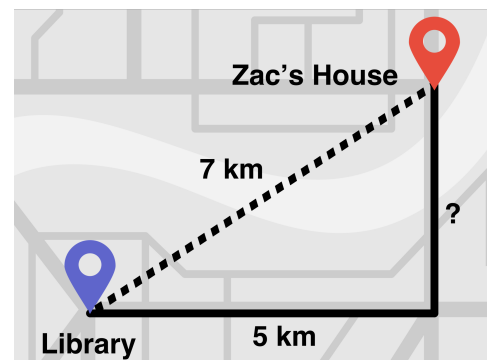
1.) A large rectangular park is 7.5 km long and 9.9 km wide. How much shorter would your walk be if you walked diagonally across the park instead of along the two sides?

2.) Drew is using a rental truck to purchase a couch. The back of the truck is 166 cm above the ground and the ramp is 316 cm long. What is the horizontal distance between the bottom of the ramp and the back of the truck (to the nearest tenth of a cm)?



3.) The diagonal of a rectangle is 123.8 cm. If the rectangle has a length of 70.4 cm, what is the width of the rectangle (to the nearest tenth of a cm)?

4.) After finishing study session at the library, Zac walked 5 kilometers east and then a certain number of kilometers north back to his home, which is 7 kilometers away, diagonally, from where he started at the library. How many total kilometers did Zac walk (to the nearest tenth of a km)?



ANSWER KEY

1.) **Diagonal Walk:** 12.4 km

Walking Along the Sides: $7.5 + 9.9 = 17.4$

Difference: $17.4 - 12.4 = 5$

You would have to walk an extra 5 kilometers

2.) **The horizontal distance between the bottom of the ramp and the back of the truck is 268.9 cm.**

3.) **The width is 101.8 cm.**

4.) **North Distance Walked:** 4.9 km

Total Distance Walked: $5 + 4.9 = 9.9$

Zac walked a total of 9.9 kilometers.