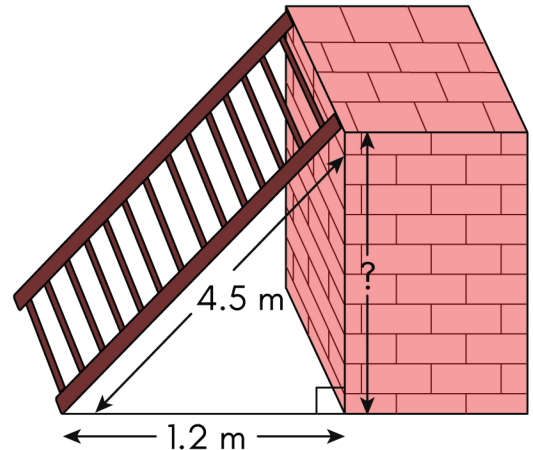


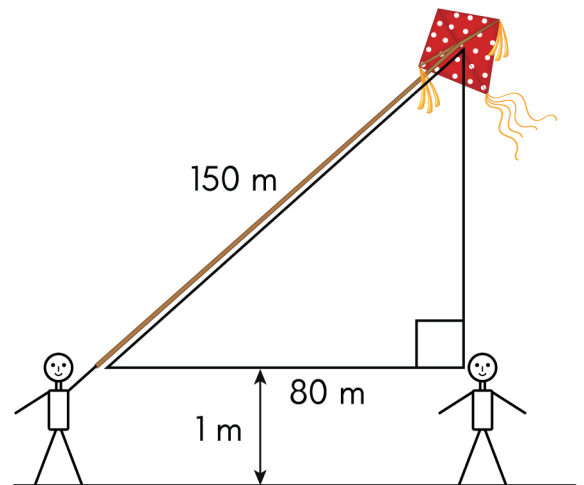
Pythagorean Theorem Word Problems

Solve the following problems using the Pythagorean theorem.

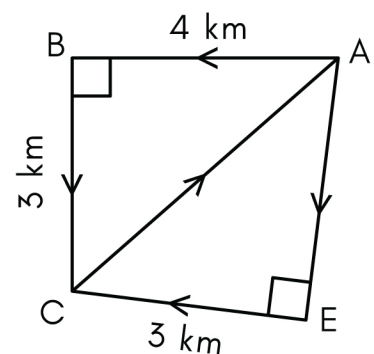
- 1 A ladder of 4.5 m length leans against a vertical wall. The foot of the ladder is 1.2 m from the wall as shown in the figure. How far up the wall can the ladder reach?



- 2 A kite is attached to a string 150 m long. Daniel holds the end of the string 1 m above the ground and the horizontal distance of Daniel from Prince is 80 m as shown in the diagram. Find the distance of the kite from the ground.



- 3 A horse race starts and finishes at A. The movement of the horses are in the order AB, BC, CA, AE, EC, AND CA. Find AE and AC.

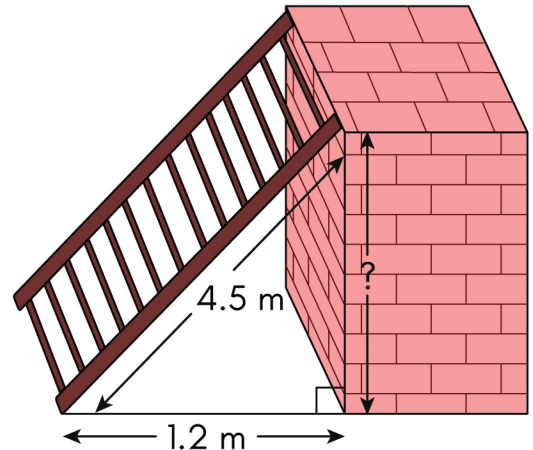


AE = _____ AC = _____

Pythagorean Theorem Word Problems

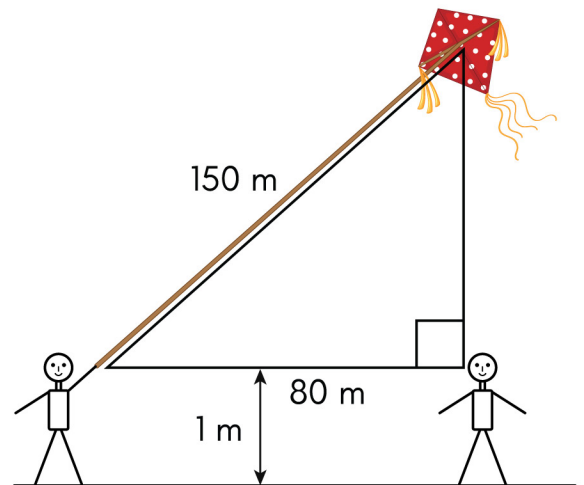
Answers

- 1 A ladder of 4.5 m length leans against a vertical wall. The foot of the ladder is 1.2 m from the wall as shown in the figure. How far up the wall can the ladder reach?



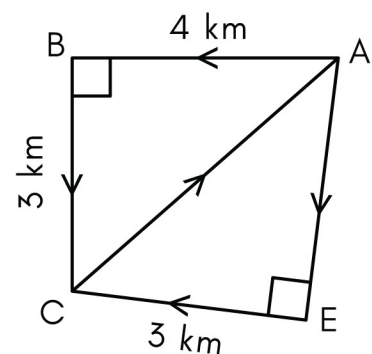
4.34 m

- 2 A kite is attached to a string 150 m long. Daniel holds the end of the string 1 m above the ground and the horizontal distance of Daniel from Prince is 80 m as shown in the diagram. Find the distance of the kite from the ground.



127.89 m

- 3 A horse race starts and finishes at A. The movement of the horses are in the order AB, BC, CA, AE, EC, AND CA. Find AE and AC.



AE = 4 km AC = 5 km