

Name: _____

Date: _____

Pythagorean Theorem - Word Problems

Solve the following questions using the Pythagorean theorem.

- ① Kevin walked 3 km towards west and then 4 km towards south. Calculate how far he is from his starting point.

- ② The two sides of a right triangle are 8 cm and 12 cm. Find the missing side length if it is the hypotenuse of the triangle.

- ③ A 15 feet tree casts a shadow that is 8 feet long. What is the distance from the tip of the tree to the tip of its shadow?

- ④ What is the length of the diagonal of a 10 cm by 15 cm rectangle?

Pythagorean Theorem - Word Problems

Answers

- ① Kevin walked 3 km towards west and then 4 km towards south. Calculate how far he is from his starting point.

5 km

- ② The two sides of a right triangle are 8 cm and 12 cm. Find the missing side length if it is the hypotenuse of the triangle.

$4\sqrt{13}$ cm

- ③ A 15 feet tree casts a shadow that is 8 feet long. What is the distance from the tip of the tree to the tip of its shadow?

17 feet

- ④ What is the length of the diagonal of a 10 cm by 15 cm rectangle?

$5\sqrt{13}$ cm