Name: _____

Pythagorean Theorem Word Problems A

Draw a picture and solve each problem.

Learn: Find the right triangle in the story (ladders, ramps, diagonals). Use $a^2 + b^2 = c^2$.

Example: Kai walks 9 blocks east and then 12 blocks north. How far is he from where he started, in a straight line?

Answer: 15 blocks

1. A rectangular field is 7 m by 8 m. How long is the diagonal? Round to the nearest tenth.

   Answer: _____

2. A square garden has sides of 14 m. How long is a path along the diagonal? Round to the nearest tenth.

   Answer: _____

3. A 13 ft ladder leans against a wall. Its top reaches 12 ft up the wall. How far is the base from the wall?

   Answer: _____

4. A ramp rises 5 ft over a horizontal distance of 12 ft. How long is the ramp?

   Answer: _____

5. A TV screen is 40 in wide and 30 in tall. What is the diagonal length?

   Answer: _____

6. Kai walks 5 blocks east and then 12 blocks north. How far is he from where he started, in a straight line?

   Answer: _____

7. A rectangular field is 13 m by 4 m. How long is the diagonal? Round to the nearest tenth.

   Answer: _____

8. A square garden has sides of 11 m. How long is a path along the diagonal? Round to the nearest tenth.

   Answer: _____

Name: **ANSWER KEY**

Pythagorean Theorem Word Problems A

Draw a picture and solve each problem.

Learn: Find the right triangle in the story (ladders, ramps, diagonals). Use $a^2 + b^2 = c^2$.

Example: Kai walks 9 blocks east and then 12 blocks north. How far is he from where he started, in a straight line?

Answer: 15 blocks

1. A rectangular field is 7 m by 8 m. How long is the diagonal? Round to the nearest tenth.

   Answer: 10.6 m

2. A square garden has sides of 14 m. How long is a path along the diagonal? Round to the nearest tenth.

   Answer: 19.8 m

3. A 13 ft ladder leans against a wall. Its top reaches 12 ft up the wall. How far is the base from the wall?

   Answer: 5 ft

4. A ramp rises 5 ft over a horizontal distance of 12 ft. How long is the ramp?

   Answer: 13 ft

5. A TV screen is 40 in wide and 30 in tall. What is the diagonal length?

   Answer: 50 in

6. Kai walks 5 blocks east and then 12 blocks north. How far is he from where he started, in a straight line?

   Answer: 13 blocks

7. A rectangular field is 13 m by 4 m. How long is the diagonal? Round to the nearest tenth.

   Answer: 13.6 m

8. A square garden has sides of 11 m. How long is a path along the diagonal? Round to the nearest tenth.

   Answer: 15.6 m