Name: _____

Pythagorean Theorem Word Problems B

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: A ramp rises 5 ft over a horizontal distance of 12 ft. How long is the ramp?
Answer: 13 ft

1. A square garden has sides of 7 m. How long is a path along the diagonal? Round to the nearest tenth.

   Answer: _____

2. A TV screen is 24 in wide and 18 in tall. What is the diagonal length?

   Answer: _____

3. Kai walks 6 blocks east and then 8 blocks north. How far is he from where he started, in a straight line?

   Answer: _____

4. A rectangular field is 16 m by 8 m. How long is the diagonal? Round to the nearest tenth.

   Answer: _____

5. 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: _____

6. A square garden has sides of 18 m. How long is a path along the diagonal? Round to the nearest tenth.

   Answer: _____

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

   Answer: _____

8. A rectangular field is 13 m by 5 m. How long is the diagonal? Round to the nearest tenth.

   Answer: _____

Name: **ANSWER KEY**

Pythagorean Theorem Word Problems B

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: A ramp rises 5 ft over a horizontal distance of 12 ft. How long is the ramp?
Answer: 13 ft

1. A square garden has sides of 7 m. How long is a path along the diagonal? Round to the nearest tenth.

   Answer: 9.9 m

2. A TV screen is 24 in wide and 18 in tall. What is the diagonal length?

   Answer: 30 in

3. Kai walks 6 blocks east and then 8 blocks north. How far is he from where he started, in a straight line?

   Answer: 10 blocks

4. A rectangular field is 16 m by 8 m. How long is the diagonal? Round to the nearest tenth.

   Answer: 17.9 m

5. 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

6. A square garden has sides of 18 m. How long is a path along the diagonal? Round to the nearest tenth.

   Answer: 25.5 m

7. 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

8. A rectangular field is 13 m by 5 m. How long is the diagonal? Round to the nearest tenth.

   Answer: 13.9 m