

NAME: _____

P.I. G.G.39: Investigate, justify, and apply theorems about special parallelograms (rectangles, squares) involving their angles, sides, and diagonals

1. Find the measure, to the nearest tenth, of the diagonal of a rectangle with dimensions 16 cm by 13 cm.

[A] 20.6 cm [B] 19.5 cm
[C] 9.3 cm [D] 5.4 cm

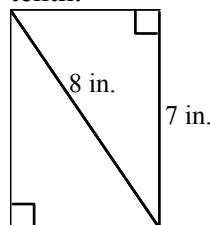
2. Find the measure, to the nearest tenth, of the diagonal of a rectangle with dimensions 18 cm by 9 cm.

[A] 5.2 cm [B] 20.1 cm
[C] 15.6 cm [D] 19 cm

3. Find the measure, to the nearest tenth, of the diagonal of a rectangle with dimensions 19 cm by 7 cm.

[A] 5.1 cm [B] 20.2 cm
[C] 17.7 cm [D] 21.3 cm

4. Use any problem solving strategy to solve the following problem. Find the width of the box below. Write your answer in simplest radical form and as a decimal rounded to the nearest tenth.



5. Use any problem solving strategy to solve the following problem. The dimensions of a rectangle are 4 and 9. What is the sum of the lengths of the diagonals of the rectangle? Write your answer in simplest radical form.

[1] A

[2] B

[3] B

[4] $\sqrt{15} \approx 3.9$ in.

[5] $2\sqrt{97}$