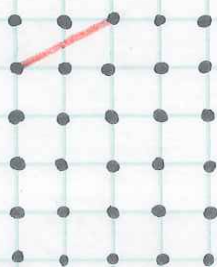


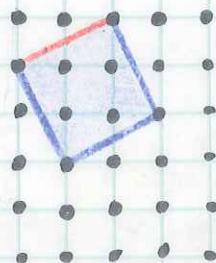
2.3: Using Squares to Find Lengths

Focus Question: "How can you find the distance between any two points on a grid?"

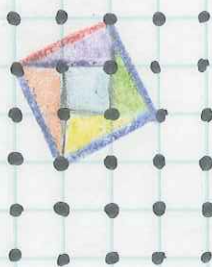
√ → This symbol is a square root symbol. It is a radical.



You can find the length of any segment by creating a square. Use the segment as one of the sides.



Use the area of the square to determine the side length.



 = 1 unit

 = 1 unit

4 triangles and 1 square: $4 + 1 = 5$

The area is 5 units².

Since a side \times side = area, a side \times side = 5.

side \times side = side². If side² = 5, then a side is $\sqrt{5}$ units.

The segment length is $\sqrt{5}$ units.