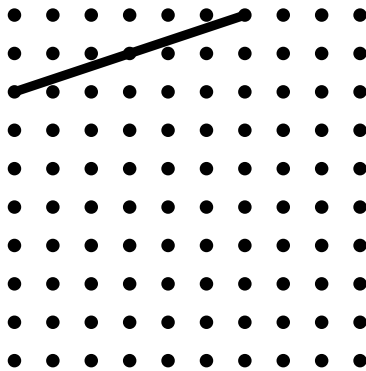


FINDING LENGTHS OF TILTED LINES

1. On the 5-dot-by-5-dot grids on the next page, draw tilted line segments of various lengths by connecting a pair of dots. Try to draw tilted segments with as many different lengths as possible. Use what you learned in your *Looking for Squares* investigation to find the lengths of the tilted segments. Label each segment with its length. Use the $\sqrt{\quad}$ symbol to express lengths that are not whole numbers.
2. Estimate several lengths. Explain the reasoning entailed in making your estimates.
3. Express the length of the line segment below using the $\sqrt{\quad}$ symbol.



4. Explain why you need to draw a square on the segment in order to find the length of the tilted segment,
5. How do you know your shape is a square? What strategies do you use to draw a square?

ENCLOSED 5-DOT BY 5-DOT GRIDS

