

6-6; Placing Figures in the Coordinate Plane

CA Standards: 17 (Coordinate Geometry)

Distance Formula:

$$\text{distance (d)} = \text{square root of } ((x_2 - x_1)^2 + (y_2 - y_1)^2)$$

When showing a figure is a parallelogram use the distance formula to show:

- 1) congruent sides
- 2) congruent diagonals

$$\text{slope (m)} = \frac{y_2 - y_1}{x_2 - x_1}$$

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$$x_2 - x_1$$

When showing a figure is a parallelogram use the slope formula to show:

- 1) parallel sides (equal slopes, remember?)
- 2) perpendicular diagonals (the slopes equal  $-1$  when multiplied together, remember?)

Use these two formulas, graph paper and a ruler to solve the next few exercises on page 344.