

Key

Math 1

Learn Check 5.2-5.4

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Find the midpoint of (3, -5) and (-4, -9).

$$M = \left( \frac{3 + -4}{2}, \frac{-5 + -9}{2} \right)$$
$$= \left( \frac{-1}{2}, -7 \right)$$

2. Find the distance between (3, -5) and (-4, -9).

$$d^2 = 7^2 + 4^2$$

$$d^2 = 49 + 16$$

$$d^2 = 65$$

$$d = \sqrt{65} \approx 8.062$$

Given vertices A (-1, 2) B(2, 3) C(2, -1), find the following.

3. Find the perimeter of the triangle.

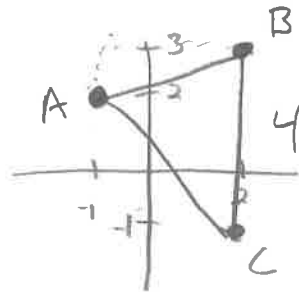
$$(\overline{AB})^2 = 3^2 + 1^2$$

$$\overline{AB} = \sqrt{10}$$

$$(\overline{AC})^2 = 3^2 + 3^2$$

$$\overline{AC} = \sqrt{18}$$

$$P = 4 + \sqrt{10} + \sqrt{18} \approx \boxed{11.405 \text{ units}}$$



4. Find the area of the triangle.

$$A = \frac{4 \cdot 3}{2} = \frac{12}{2} = \boxed{6 \text{ units}^2}$$