

G1a: Coordinate Geometry Check-in Quiz

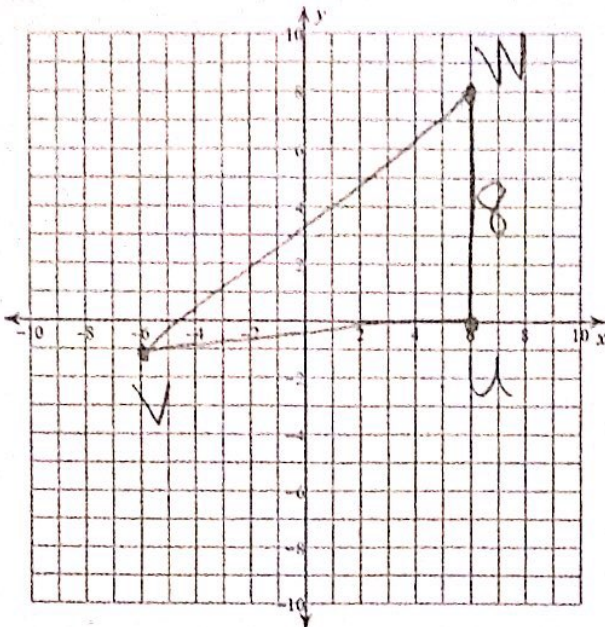
Date _____

Period _____

C Level:

Plot each point and connect the points to make a triangle. Use this triangle for questions 1 - 5

- 1) $U(6, 0)$ $V(-6, -1)$ $W(6, 8)$



- 2) Find the length of UV.

$$\overline{UV} = \sqrt{1^2 + 12^2}$$

$$\overline{UV} = \sqrt{1 + 144}$$

$$= \sqrt{145} \approx 12.04 \text{ u}$$

- 3) Find the length of VW.

$$\overline{VW} = \sqrt{9^2 + 12^2}$$

$$= \sqrt{81 + 144}$$

$$= \sqrt{225}$$

$$\overline{VW} = 15 \text{ u}$$

- 4) Find the area of triangle UVW.

$$A = \frac{1}{2} (8)(12)$$

$$= 48 \text{ u}^2$$

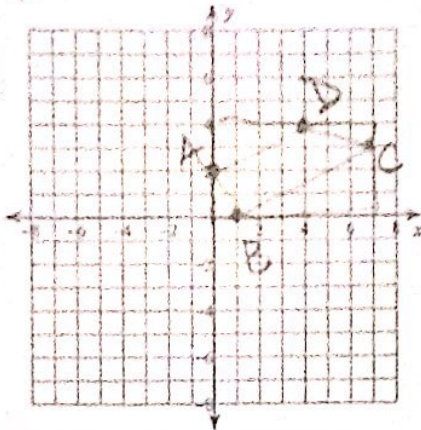
- 5) Find the perimeter of triangle UVW.

$$P = 15 + 12.04 + 8 = 35.04 \text{ u}$$

B Level:

Plot each point and connect the points to make a quadrilateral. Use this shape for questions 6-8.

- 6) Plot A (9, 2), B (1, 9), C (7, 3) and D (4, 4).



- 7) Find the area of ABCD.

$$A = 7 \cdot 4 - \left(\frac{1}{2}(2)(4) + \frac{1}{2}(1)(3) + \frac{1}{2}(1)(2) + \frac{1}{2}(3)(2) \right)$$

$$A = 28 - (4 + 1.5 + 1 + 3)$$

$$A = 28 - 9.5 = 18.5 u^2$$

- 8) Find the perimeter of ABCD.

$$AD = \sqrt{2^2 + 4^2} \approx 4.47 u$$

$$DC = \sqrt{1^2 + 3^2} \approx 3.16 u$$

$$AB = \sqrt{1^2 + 2^2} \approx 2.24 u$$

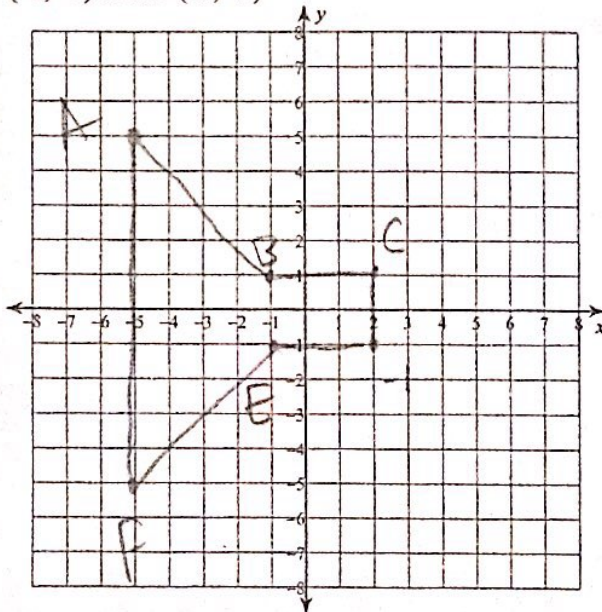
$$BC = \sqrt{6^2 + 3^2} \approx 6.71 u$$

$$P = 4.47 + 3.16 + 2.24 + 6.71 = 16.58 u$$

Bonus!

Plot and connect the points. Then find the area and perimeter of the shape.

- A (-5, 5), B (-1, 1), C (2, 1), D (2, -1), E (-1, -1) and F (-5, -5)



$$A = 7(2) + 4(4)$$

$$A = 14 + 16 = 30 u^2$$

$$AB = FE = \sqrt{4^2 + 4^2} = \sqrt{32} = 4\sqrt{2}$$

$$P = 18 + 5.66 + 5.66 \approx 39.32$$

$$P = 18 + 8\sqrt{2} \approx 29.32 u$$