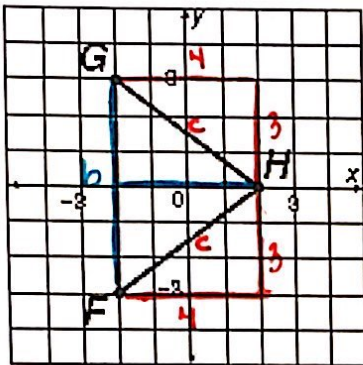


Day 2 - Perimeter and Area with the Distance Formula - Practice

Area Formulas

Rectangle: $A = lw$ Triangle: $A = \frac{1}{2}bh$ or $A = \frac{bh}{2}$

Practice: Calculate the area of the following figures. Think about which sides you need to calculate the lengths.



Area

$$A = \frac{1}{2} \cdot 6 \cdot 4$$

$$A = 12 \text{ units}^2$$

Perimeter

$$3^2 + 4^2 = c^2$$

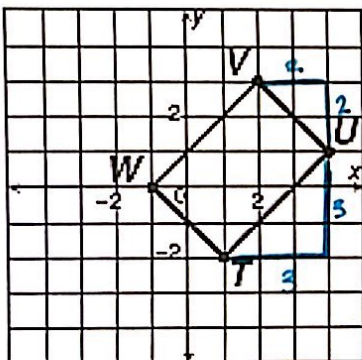
$$25 = c^2$$

$$5 = c$$

Perimeter

$$P = 5 + 5 + 6$$

$$P = 16 \text{ units}$$



Area

$$2^2 + 2^2 = c^2$$

$$8 = c^2$$

$$2\sqrt{2} = c$$

$$3^2 + 3^2 = c^2$$

$$18 = c^2$$

$$3\sqrt{2} = c$$

$$A = 2\sqrt{2} \cdot 3\sqrt{2}$$

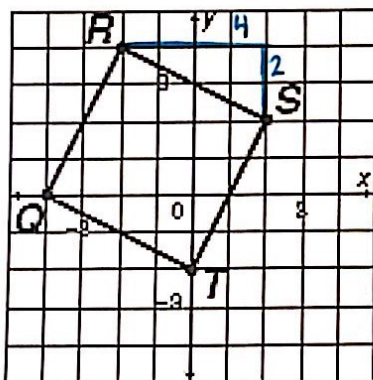
$$= 6 \cdot \sqrt{4} = 12 \text{ units}^2$$

Perimeter

$$P = 2\sqrt{2} + 2\sqrt{2} + 3\sqrt{2} + 3\sqrt{2}$$

$$P = 10\sqrt{2} \text{ units}$$

$$P \approx 14.1 \text{ units}$$



Area

$$2^2 + 4^2 = c^2$$

$$20 = c^2$$

$$2\sqrt{5} = c$$

$$A = 2\sqrt{5} \cdot 2\sqrt{5}$$

$$A = 4\sqrt{25}$$

$$A = 20 \text{ units}^2$$

Perimeter

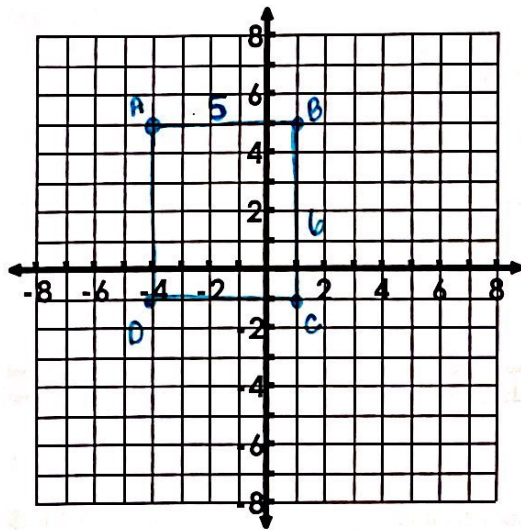
$$P = 2\sqrt{5} + 2\sqrt{5} + 2\sqrt{5} + 2\sqrt{5}$$

$$P = 8\sqrt{5} \text{ units}$$

$$P \approx 17.9 \text{ units}$$

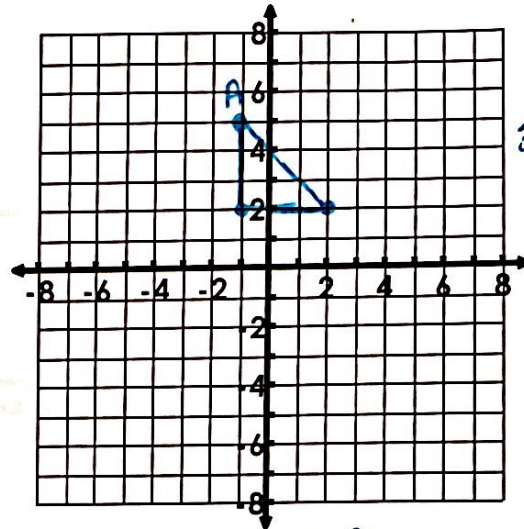
Plot the given points and find the area of each shape.

4. A (-4, 5), B (1, 5), C (1, -1), D (-4, -1)



Area = 30 units^2
 Perimeter = 22 units

5. A (-1, 5), B (2, 2), C (-1, 2)



$$3^2 + 3^2 = c^2$$

$$18 = c^2$$

$$3\sqrt{2} = c$$

Area = 4.5 units^2
 Perimeter = $6 + 3\sqrt{2} \text{ units}$
 $\approx 10.2 \text{ units}$