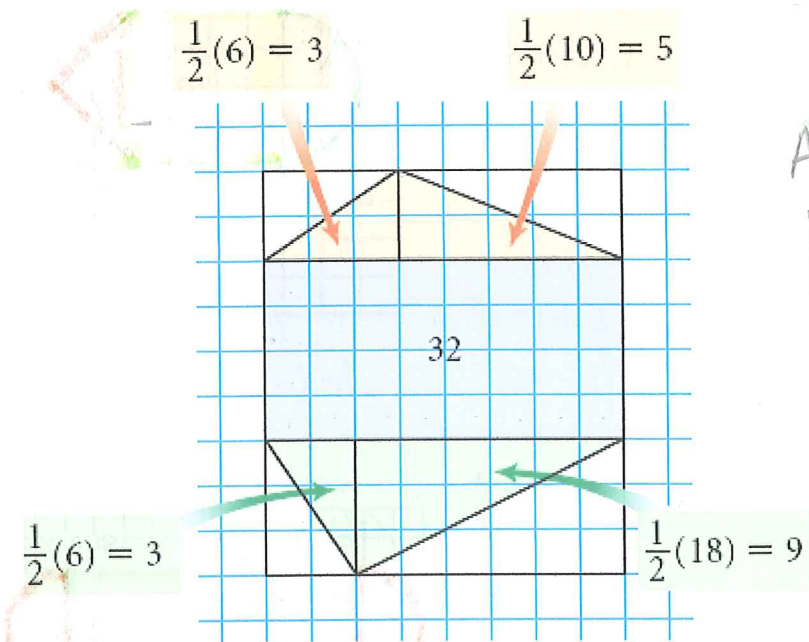


11.4 Coordinate Geometry and Composite Figures

Notes and Examples

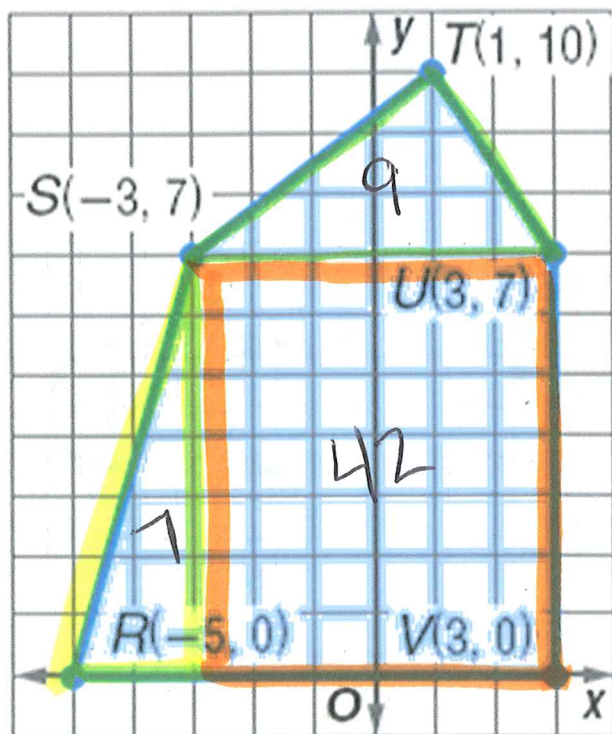
Example: Find the area of each different figure. Color the separate regions and add all areas together.



$$\text{Area} = 3 + 5 + 32 + 3 + 9$$

$$\boxed{A = 52 \text{ units}^2}$$

You try this example:



$$\text{Area} = 42 + 9 + 7 = \boxed{58 \text{ units}^2}$$

$$A = \frac{1}{2}(6)(3)$$

$$A = \frac{1}{2}(18)$$

$$A = 9 \text{ units}^2$$

$$A = (7)(6)$$

$$A = 42 \text{ units}^2$$

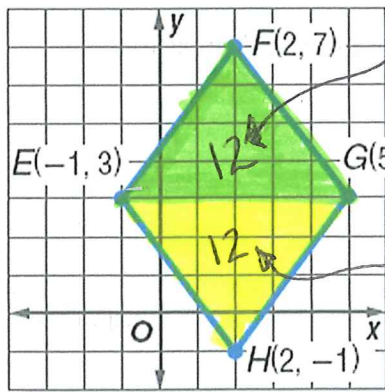
$$A = \frac{1}{2}(2)(7)$$

$$A = \frac{1}{2}(4)$$

$$A = 7 \text{ units}^2$$

Find the area of each composite figure. You must show all work.

1.



$$A = \frac{1}{2} (6)(4)$$

$$A = \frac{1}{2} (24)$$

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

$$A = \frac{1}{2} (6)(4)$$

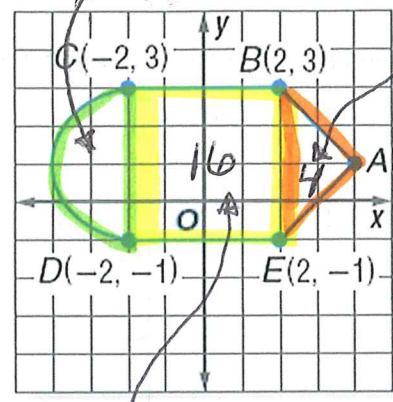
$$A = \frac{1}{2} (24)$$

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

$$\text{Area} = 12 + 12$$

$$\text{Area} = 24 \text{ units}^2$$

2.



$$A = \pi(2)^2$$

$$A = 4\pi \rightarrow \frac{1}{2}(4\pi) = 2\pi$$

b/c $\frac{1}{2}$ circle

$$A = \frac{1}{2} (4)(4)$$

$$A = 8$$

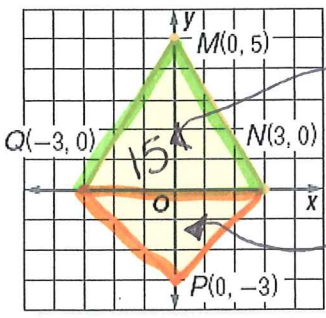
$$A = 4$$

$$A = (4)(4) = 16$$

$$\text{Area} = 4 + 16 + 2\pi$$

$$\text{Area} = 20 + 2\pi \text{ units}^2$$

3.



$$\text{Area} = \frac{1}{2} (6)(5)$$

$$A = \frac{1}{2} (30)$$

$$A = 15$$

$$A = \frac{1}{2} (6)(3)$$

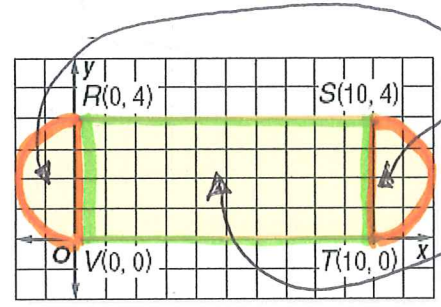
$$A = \frac{1}{2} (18)$$

$$A = 9$$

$$\text{Area} = 15 + 9 =$$

$$A = 24 \text{ units}^2$$

4.



$$A = \pi(2)^2$$

$$A = 4\pi$$

$$A = (10)(4)$$

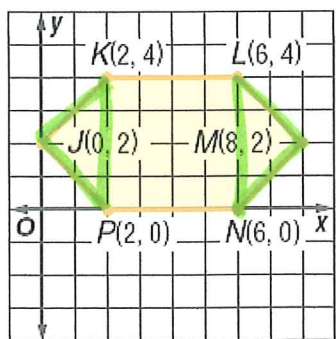
$$A = 40$$

$$\text{Area} = 40 + 4\pi$$

$$A = 40 + 4\pi \text{ units}^2$$

Now you try!!!!

5.

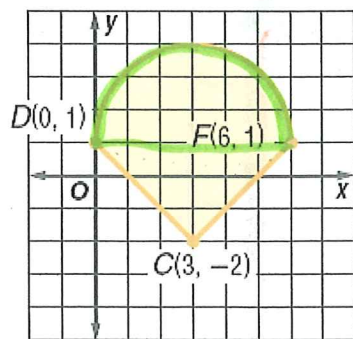


$$A = 16 + 8 = 24 \text{ units}^2$$

$$A = (4)(4) = 16$$

$$A = 2 \left(\frac{1}{2} (4)(2) \right) = 8$$

6.

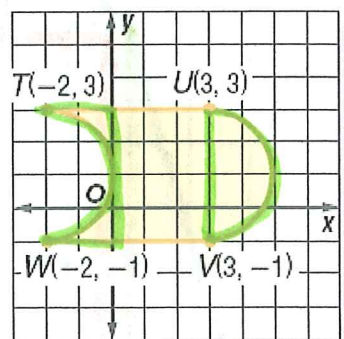


$$A = 9 + 4.5\pi \text{ units}$$

$$A = \frac{1}{2} (6)(3) = 9$$

$$A = \frac{1}{2} \pi (3)^2 = 4.5\pi$$

7.



$$A = 12 + 8 = 20 \text{ units}^2$$

$$A = (3)(4) = 12$$

$$A = (2)(4) = 8$$