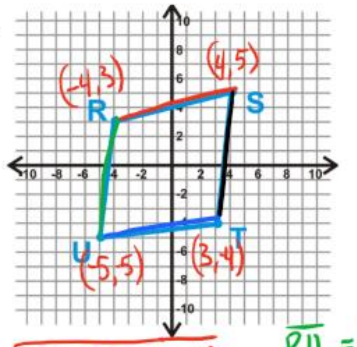
Perimeter and Area Practice Name_____ Block_____

Find the perimeter of the following shapes.

1.



$\overline{RS} = \sqrt{(-4-4)^2+(3-5)^2}$

$\overline{RS} = \sqrt{64+4}$

$\overline{RS} = \sqrt{68}$

$\overline{RU} = \sqrt{(-5-(-4))^2+(-5-3)^2}$

$\sqrt{1+64}$

$\overline{RU} = \sqrt{65}$

$\overline{UT} = \sqrt{(-5-3)^2+(-5-(-4))^2}$

$= \sqrt{64+1}$

$\overline{UT} = \sqrt{65}$

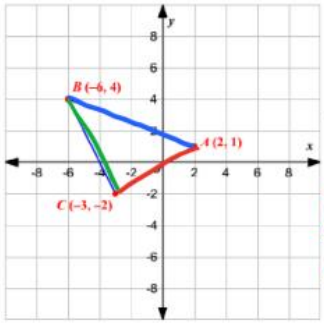
$\overline{ST} = \sqrt{(4-3)^2+(5-(-4))^2}$

$\overline{ST} = \sqrt{1+81}$

$\overline{ST} = \sqrt{82}$

$P = \sqrt{68}+\sqrt{65}+\sqrt{65}+\sqrt{82} = 33.426$ units

2.



$\overline{AB} = \sqrt{(2-(-6))^2+(1-4)^2}$

$\overline{AB} = \sqrt{64+9}$

$\overline{AB} = \sqrt{73}$

$\overline{AC} = \sqrt{(2-(-3))^2+(1-(-2))^2}$

$\overline{AC} = \sqrt{25+9}$

$\overline{AC} = \sqrt{34}$

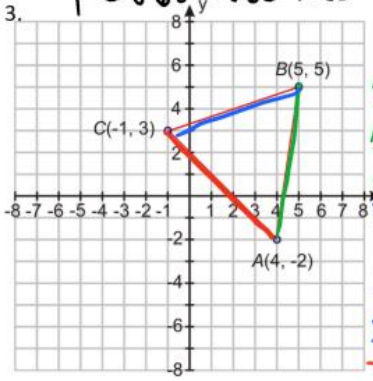
$\overline{BC} = \sqrt{(-6-(-3))^2+(4-(-2))^2}$

$\overline{BC} = \sqrt{9+36}$

$\overline{BC} = \sqrt{45}$

$P = \sqrt{73}+\sqrt{34}+\sqrt{45} = 21.083$ units

3.



$\overline{AB} = \sqrt{(4-5)^2+(-2-5)^2}$

$\overline{AB} = \sqrt{1+49}$

$\overline{AB} = \sqrt{50}$

$\overline{BC} = \sqrt{(5-(-1))^2+(5-3)^2}$

$\overline{BC} = \sqrt{36+4}$

$\overline{BC} = \sqrt{40}$

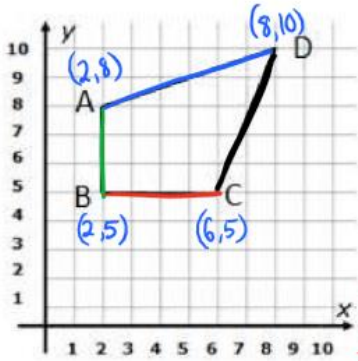
$\overline{AC} = \sqrt{(4-(-1))^2+(-2-3)^2}$

$\overline{AC} = \sqrt{25+25}$

$\overline{AC} = \sqrt{50}$

$P = \sqrt{50}+\sqrt{40}+\sqrt{50} = 20.467$ units

4.



$\overline{AD} = \sqrt{(8-2)^2+(10-8)^2}$

$\overline{AD} = \sqrt{36+4}$

$\overline{AD} = \sqrt{40}$

$\overline{AB} = \sqrt{(2-2)^2+(8-5)^2}$

$\overline{AB} = \sqrt{0+9}$

$\overline{AB} = \sqrt{9} = 3$

$\overline{BC} = \sqrt{(6-2)^2+(5-5)^2}$

$\overline{BC} = \sqrt{16+0}$

$\overline{BC} = \sqrt{16} = 4$

$\overline{CD} = \sqrt{(6-8)^2+(5-10)^2}$

$\overline{CD} = \sqrt{4+25}$

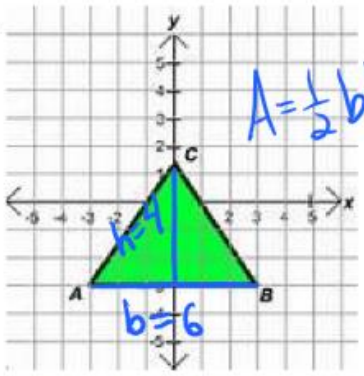
$\overline{CD} = \sqrt{29}$

$P = \sqrt{40}+3+4+\sqrt{29}$

$P = 18.710$ units

Find the area of the following figures.

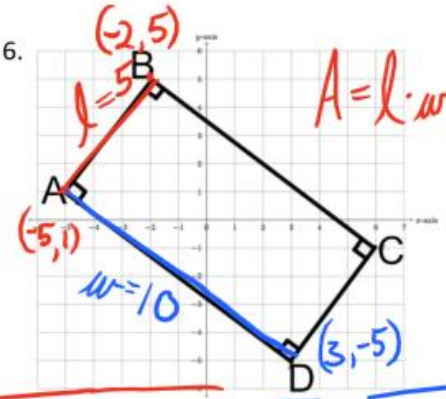
5.



$A = \frac{1}{2}bh$

$A = \frac{1}{2}(6)(4) = 12 \text{ units}^2$

6.



$A = l \cdot w$

$\overline{AB} = \sqrt{(-5-(-2))^2 + (1-5)^2}$

$\overline{AB} = \sqrt{9+16}$

$\overline{AB} = \sqrt{25} = 5$

$\overline{AD} = \sqrt{(-5-3)^2 + (1-(-5))^2}$

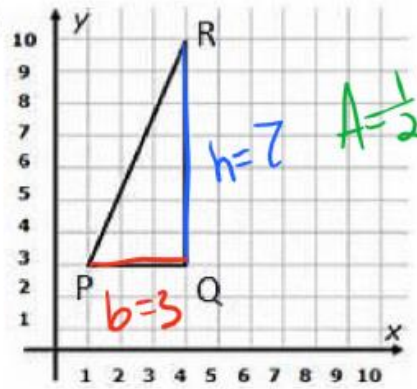
$\overline{AD} = \sqrt{64+36}$

$\overline{AD} = \sqrt{100}$

$\overline{AD} = 10$

$A = 10 \cdot 5 = 50 \text{ units}^2$

7.

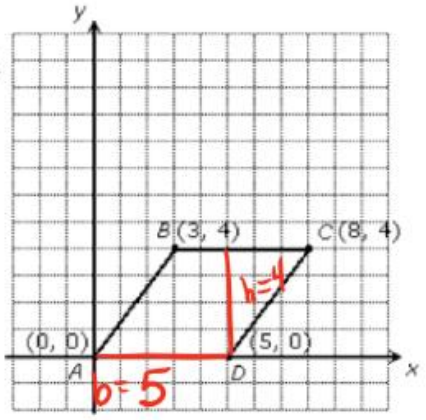


$A = \frac{1}{2}b \cdot h$

$A = \frac{1}{2}(3)(7)$

$A = 10.5 \text{ unit}^2$

8.



$A = b \cdot h$

$A = 5 \cdot 4$

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