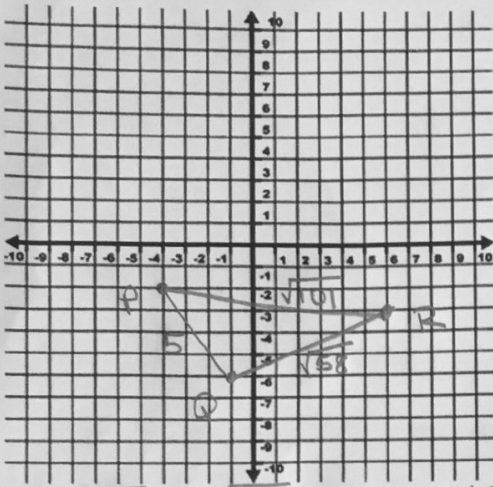
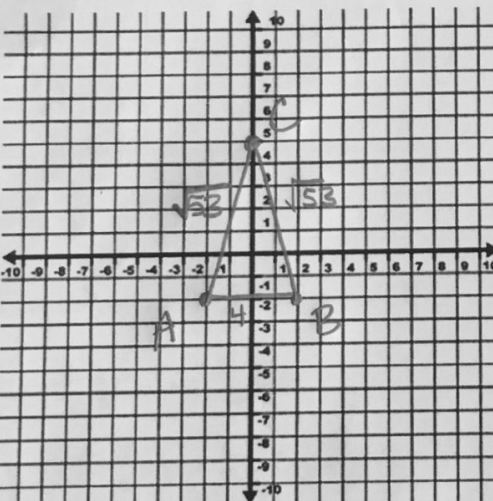


1. Find the perimeter of $\triangle PQR$ with vertices located at $P(-4, -2)$, $Q(-1, -6)$, $R(6, -3)$



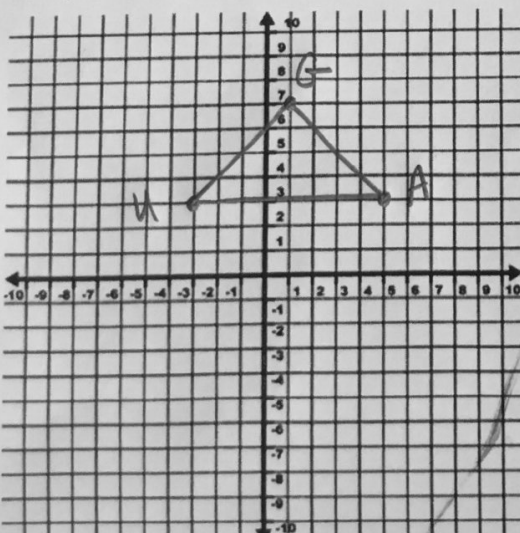
$$5 + \sqrt{101} + \sqrt{58} \approx 22.67$$

2. Find the perimeter of $\triangle ABC$ with vertices located at $A(-2, -2)$, $B(2, -2)$, $C(0, 5)$



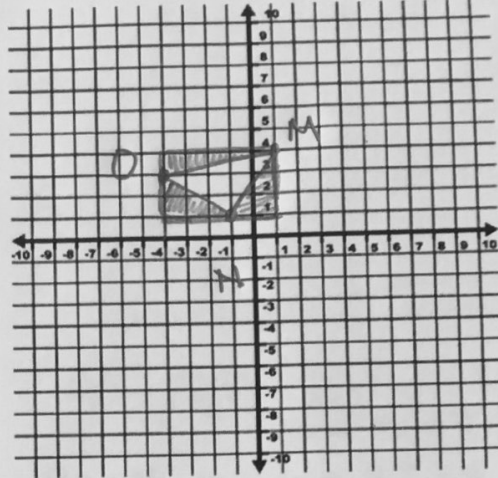
$$4 + \sqrt{53} + \sqrt{53} \approx 18.56$$

3. Find the area of $\triangle UGA$ with vertices located at $U(-3, 3)$, $G(1, 7)$, $A(5, 3)$



$$\begin{aligned} A &= \frac{1}{2}bh \\ &= \frac{1}{2}(8)(4) \\ &= 16 \end{aligned}$$

4. Find the area of $\triangle MNO$ with vertices located at $M(1, 4)$, $N(-1, 1)$, $O(-4, 3)$



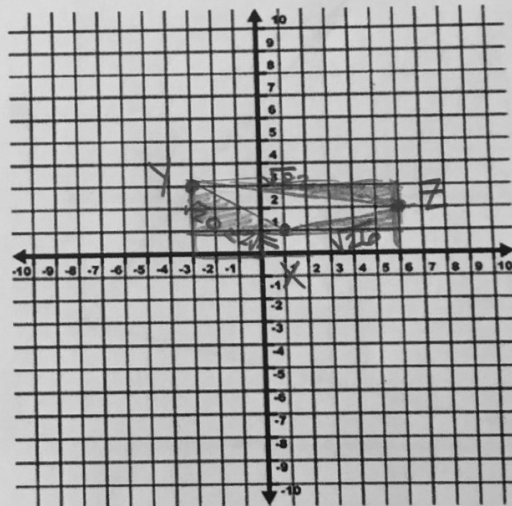
Area of rectangle - shaded Δ s

$$15 - \frac{1}{2}bh - \frac{1}{2}bh - \frac{1}{2}bh$$

$$15 - \frac{1}{2}(3)(2) - \frac{1}{2}(5)(1) - \frac{1}{2}(2)(3)$$

$$15 - 3 - 2.5 - 3 = 6.5$$

5. Find the perimeter and area of $\triangle XYZ$ with vertices located at $X(1, 1)$, $Y(-3, 3)$, $Z(6, 2)$



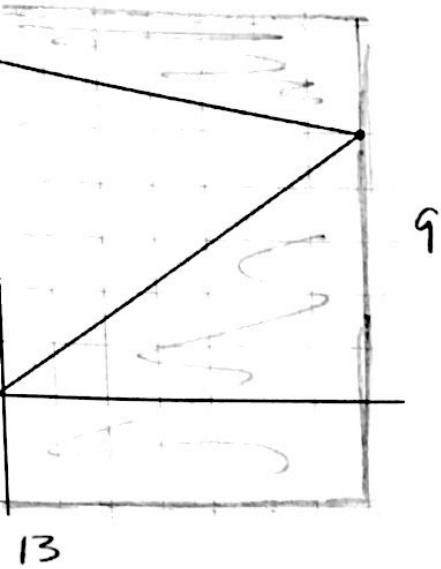
$$\begin{matrix} 20 \\ \swarrow \searrow \\ 2 \quad 5 \end{matrix}$$

$$\begin{aligned} \text{Perimeter: } & \sqrt{82} + 2\sqrt{5} + \sqrt{26} \\ & \approx 18.63 \end{aligned}$$

Area:

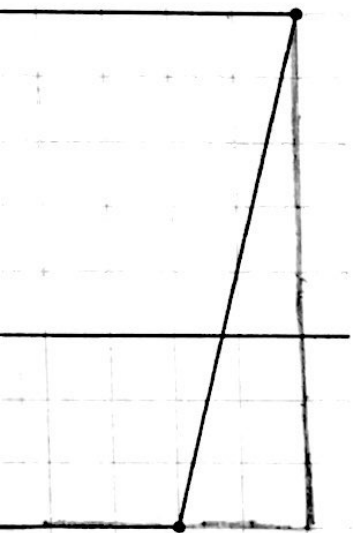
$$\begin{aligned} & 18 - \frac{1}{2}bh - \frac{1}{2}bh - \frac{1}{2}bh \\ & 18 - \frac{1}{2}(4)(2) - \frac{1}{2}(5)(1) - \frac{1}{2} \\ & 18 - 4 - 2.5 - 4.5 \\ & = 7 \end{aligned}$$

en figures.

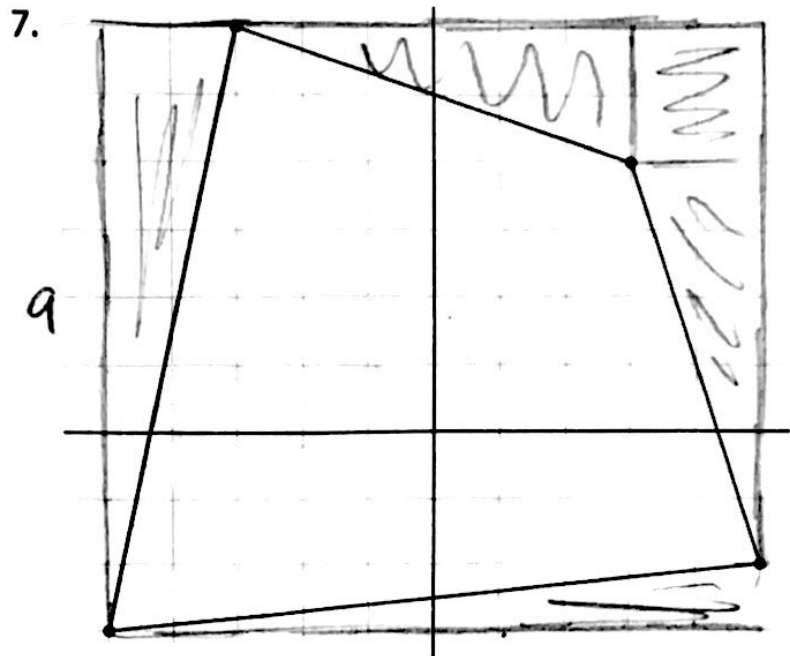


$$\frac{1}{2}(2)(12) - \frac{1}{2}(10)(7) - \frac{1}{2}(3)(5)$$

$$35 - 7.5 = 60.5$$



$$- \frac{1}{2}bh$$



$$90 - (2)(2) - \frac{1}{2}(2)(6) - \frac{1}{2}(2)(6) - \frac{1}{2}(9)(2) - \frac{1}{2}(10)(1)$$

$$90 - 4 - 6 - 6 - 4.5 - 5 = 64.5$$

