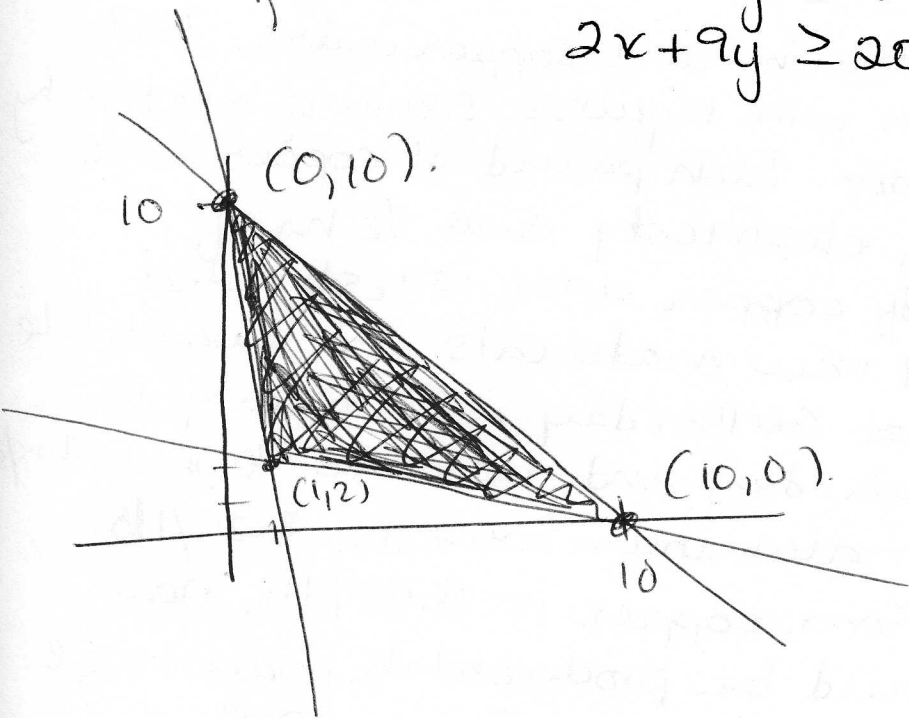


2. 10 pts

Using the graphing method, find the maximum and minimum of  $P = x + 4y$  subject to the constraints.

Put on graph board

$$\begin{aligned}x + y &\leq 10 \\ 8x + y &\geq 10 \\ 2x + 9y &\geq 20\end{aligned}$$



6 pts

| Corner pt | $P = x + 4y$ |    |
|-----------|--------------|----|
| (0, 10)   | $0 + 4(10)$  | 40 |
| (1, 2)    | $1 + 4(2)$   | 9  |
| (10, 0)   | $10 + 4(0)$  | 10 |

2pt

Max is 40 @ (0, 10)  
min is 9 @ (1, 2)

2pt

→ don't need these!