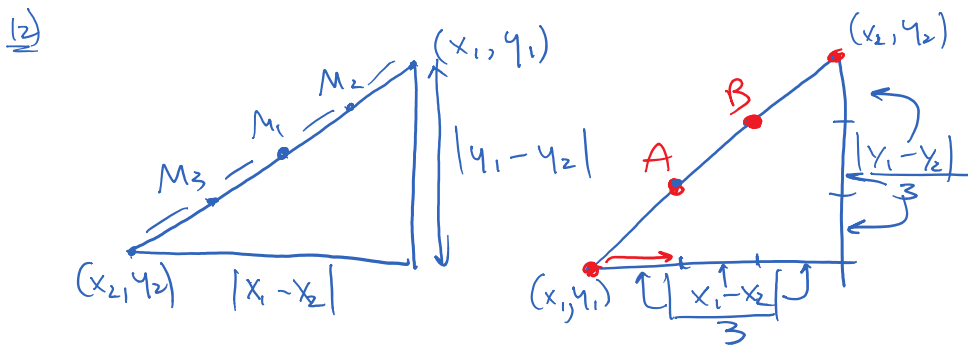
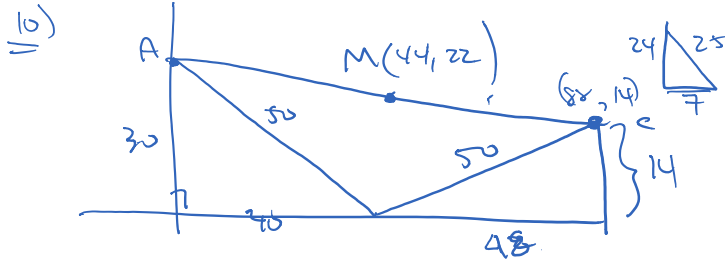
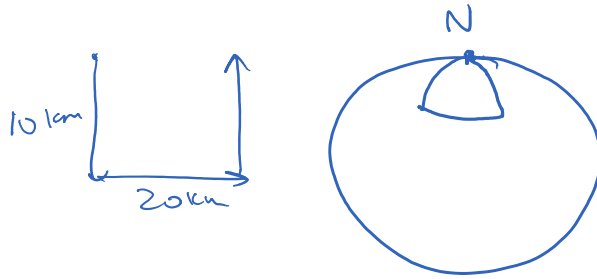


HW 7.4

April 1, 2015 8:47 PM



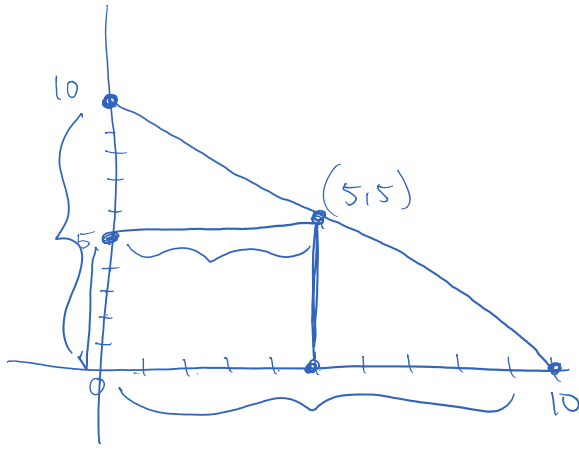
$A: \left(x_1 + \frac{|x_1 - x_2|}{3}, y_1 + \frac{|y_1 - y_2|}{3} \right)$
 $B: \left(x_1 + \frac{2|x_1 - x_2|}{3}, y_1 + \frac{2|y_1 - y_2|}{3} \right)$

13)

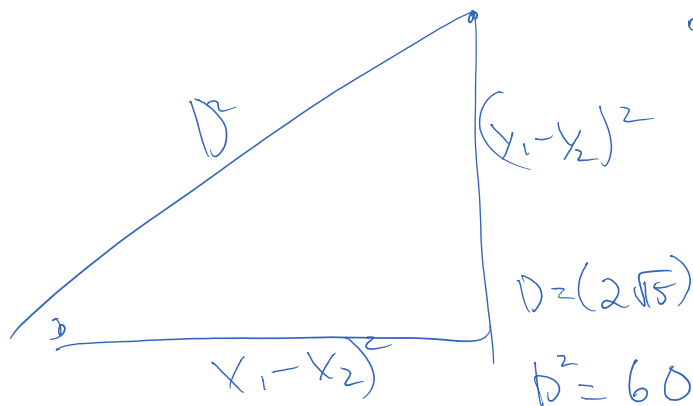
Graph of a linear programming problem. The objective function is $D(\min)$. The constraints are E , F , and G . The vertices are labeled A , B , C , D , E , and F . The optimal solution is at vertex $B(1, 3)$.

$\textcircled{1} \frac{m+s}{2} = -3$
 $m+s = -6$
 $\textcircled{2} \frac{s+p}{2} = 2$
 $s+p = 4$
 $\textcircled{3} \frac{m+p}{2} = 1$
 $m+p = 2$

$m+s = -6$
 $s+p = 4$
 $m+p = 2$
 $2m+2s+2p = 0$
 $m+s+p = 0$
 $-6+p = 0$
 $p = 6$



15) $C(1,1)$ $D(k,5)$ $D = \text{Pythagoreem thm.}$



$$(k-1)^2 + (5-1)^2 = 60$$

$$(k-1)^2 + 16 = 60$$

$$(k-1)^2 = 44$$

$$k-1 = \pm 2\sqrt{11}$$

$$k = 1 \pm 2\sqrt{11}$$

19)

