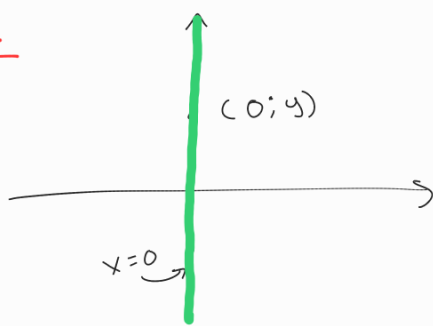
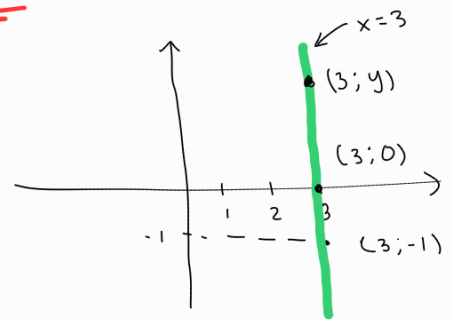


#4.2

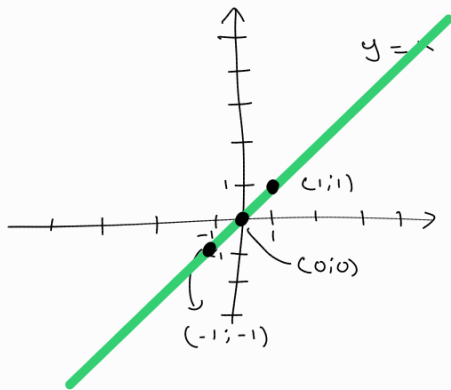


#4.3

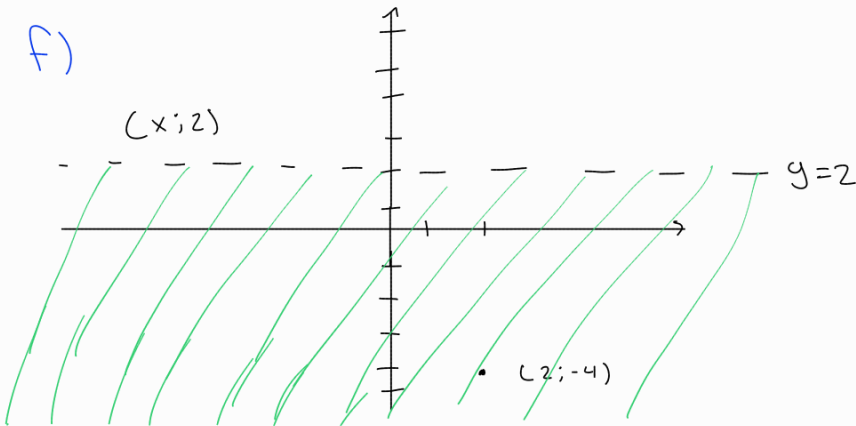


#4.4

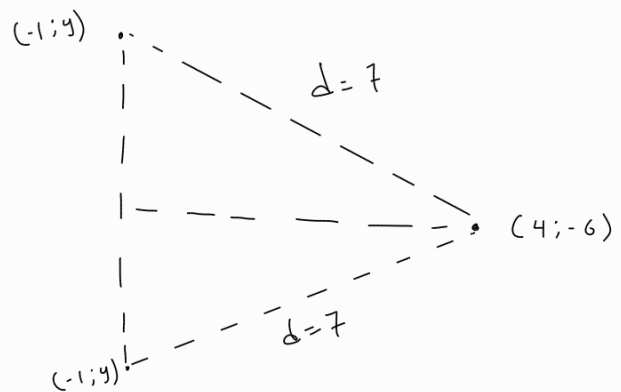
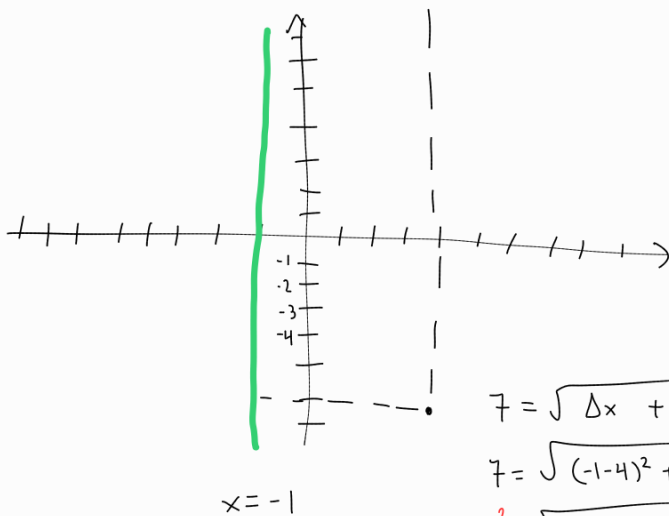
d)



f)



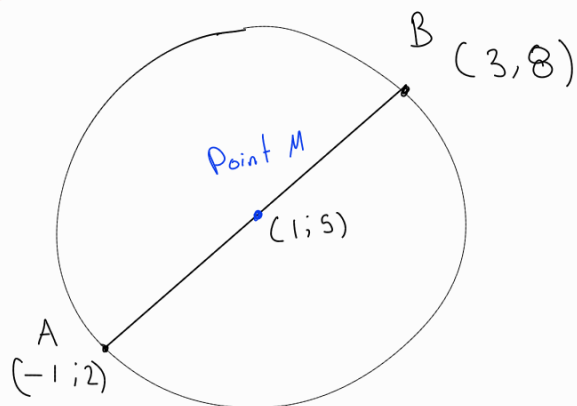
Exercise 4.13



$$\begin{aligned}
 7 &= \sqrt{\Delta x^2 + \Delta y^2} \\
 7 &= \sqrt{(-1-4)^2 + (y-(-6))^2} \\
 7^2 &= \sqrt{25 + (y+6)^2} \\
 49 &= 25 + (y+6)^2 \\
 24 &= (y+6)^2 \\
 \sqrt{24} &= y+6 \\
 -6 &= y
 \end{aligned}$$

$$-6 \pm 2\sqrt{6} = y$$

## # 4.12 P. 160



$$M = \left( \frac{-1+3}{2} ; \frac{2+8}{2} \right)$$

$$M = (1 ; 5)$$

$$\sqrt{(x-x_c)^2 + (y-y_c)^2} = R =$$

## # 4.16 P. 167

$$1) x^2 + 8x + y^2 + 10y + 15 = 0$$

↓

$$(1x^2 + 8x) + (y^2 + 10y) = -15$$

$$\left(\frac{8}{2}\right)^2$$

↓

$$\left(\frac{10}{2}\right)^2$$

$$(x^2 + 8x + 16 - 16) + (y^2 + 10y + 25 - 25) = -15$$

+16                      +25

↓

$$(x^2 + 8x + 16) + (y^2 + 10y + 25) = -15 + 16 + 25$$

$$(x+4)^2 + (y+5)^2 = 26$$

$$(x - (-4))^2 + (y - (-5))^2 = (\sqrt{26})^2$$

$\uparrow$                        $\uparrow$   
h                      k