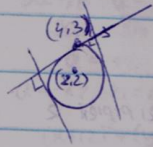


4.14
8



$$(x-2)^2 + (y-2)^2 = 5$$

$$(x-2)(4-2) + (y-2)(3-2) = 5$$

$$2x + y = 11$$

$$m = \frac{1}{2}$$

$$0 = -x + 2y + 2n \quad \leftarrow \quad y = \frac{1}{2}x + n$$

$$\sqrt{5} = \frac{|-2+4-2n|}{\sqrt{5}} \quad \rightarrow \quad 5 = |2-2n|$$

$$n = -\frac{1}{2} \quad n = 3\frac{1}{2}$$

$$0 = -x + 2y + 3, \quad 0 = -x + 2y - 7$$