

b) the distance from $(2, 5)$ is .

$$d = \sqrt{(2-4)^2 + (5-5)^2}$$

$$d = \sqrt{(2)^2}$$

$$d = 2$$

\therefore As from the distance above it is clear that position for Node B is $(2, 6)$ as the distance from both the beacons is less than 2 where this is not the case with position $(4, 5)$. Hence position of B is $(2, 6)$.

* In Addition this can also be verified by Node Centroid theory.

• the centroid for the two beacon for Node A is

$$= \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}$$

$$= \frac{4+2}{2}, \frac{5+2}{2}$$

$$= (3, 3.5)$$

\therefore the position of Node A is $(3, 3.5)$