**Example:** Find the distance between points (2,3) and (5,4)

**Example:** Find the distance between points (2, 3) and (5, 4)



**Example:** Find the distance between points (2, 3) and (5, 4) As we saw before we can compute the distance using:

distance =  $\sqrt{(\Delta x)^2 + (\Delta y)^2}$ 



**Example:** Find the distance between points (2,3) and (5,4)• As we saw before we can compute the distance using: distance =  $\sqrt{(\Delta x)^2 + (\Delta y)^2}$ We can compute  $\Delta x$  and  $\Delta y$  as:  $\Delta x$  $\Delta v$ (5, 4)distance  $\Delta y$  $\Delta x$ (2, 3)

**Example:** Find the distance between points (2,3) and (5,4)• As we saw before) we can compute the distance using: distance =  $\sqrt{(\Delta x)^2 + (\Delta y)^2}$ We can compute  $\Delta x$  and  $\Delta y$  as:  $\Delta x = 5 - 2 = 3$  $\Delta v$ (5, 4)distance  $\Delta y$  $\Delta x = 3$ (2, 3)

**Example:** Find the distance between points (2,3) and (5,4)• As we saw before) we can compute the distance using: distance =  $\sqrt{(\Delta x)^2 + (\Delta y)^2}$ We can compute  $\Delta x$  and  $\Delta y$  as:  $\Delta x = 5 - 2 = 3$   $\Delta y = 4 - 3 = 1$ (5, 4)distance  $\Delta y = 1$  $\Delta x = 3$ (2, 3)

**Example:** Find the distance between points (2,3) and (5,4)• As we saw before) we can compute the distance using: distance =  $\sqrt{(\Delta x)^2 + (\Delta y)^2} = \sqrt{(3)^2 + (1)^2}$ We can compute  $\Delta x$  and  $\Delta y$  as:  $\Delta x = 5 - 2 = 3$   $\Delta y = 4 - 3 = 1$ (5, 4)distance  $\Delta y = 1$  $\Delta x = 3$ (2, 3)

**Example:** Find the distance between points (2,3) and (5,4)• As we saw before) we can compute the distance using: distance =  $\sqrt{(\Delta x)^2 + (\Delta y)^2} = \sqrt{(3)^2 + (1)^2} = \sqrt{10}$ We can compute  $\Delta x$  and  $\Delta y$  as:  $\Delta x = 5 - 2 = 3$   $\Delta y = 4 - 3 = 1$ distance  $\sqrt{10}$  (5,4)  $\Delta y = 1$  $\Delta x = 3$ (2, 3)

**Example:** Find the distance between points (2,3) and (5,4)• As we saw before) we can compute the distance using: distance =  $\sqrt{(\Delta x)^2 + (\Delta y)^2} = \sqrt{(3)^2 + (1)^2} = \sqrt{10}$ We can compute  $\Delta x$  and  $\Delta y$  as:  $\Delta x = 5 - 2 = 3$   $\Delta y = 4 - 3 = 1$ distance  $\sqrt{10}$  (5,4)  $\Delta y = 1$  $\Delta x = 3$ (2, 3)

**Conclusion:** The distance between (2,3) and (5,4) is  $\sqrt{10}$