Distance Between Points

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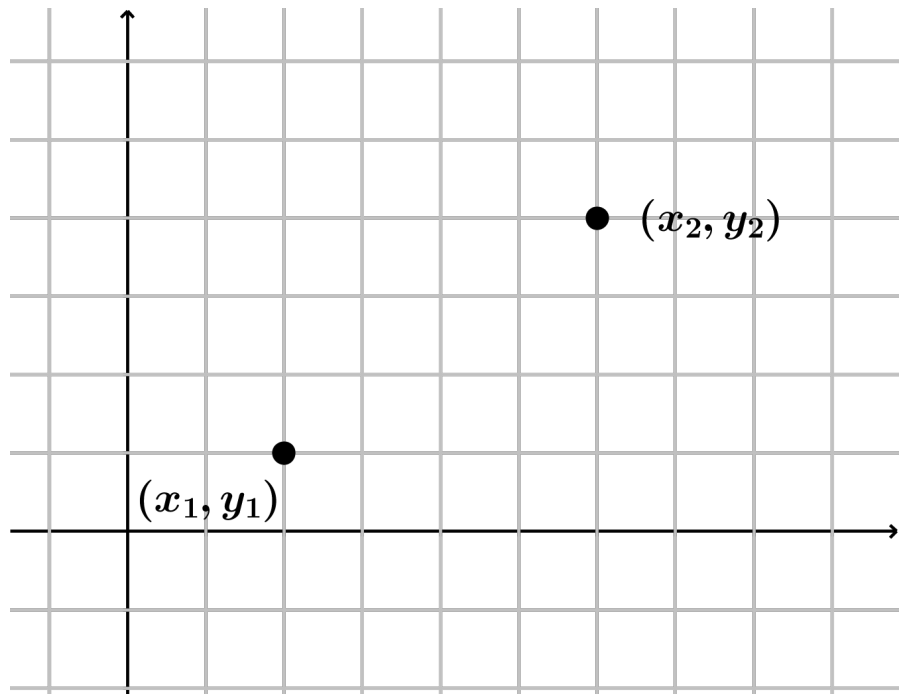
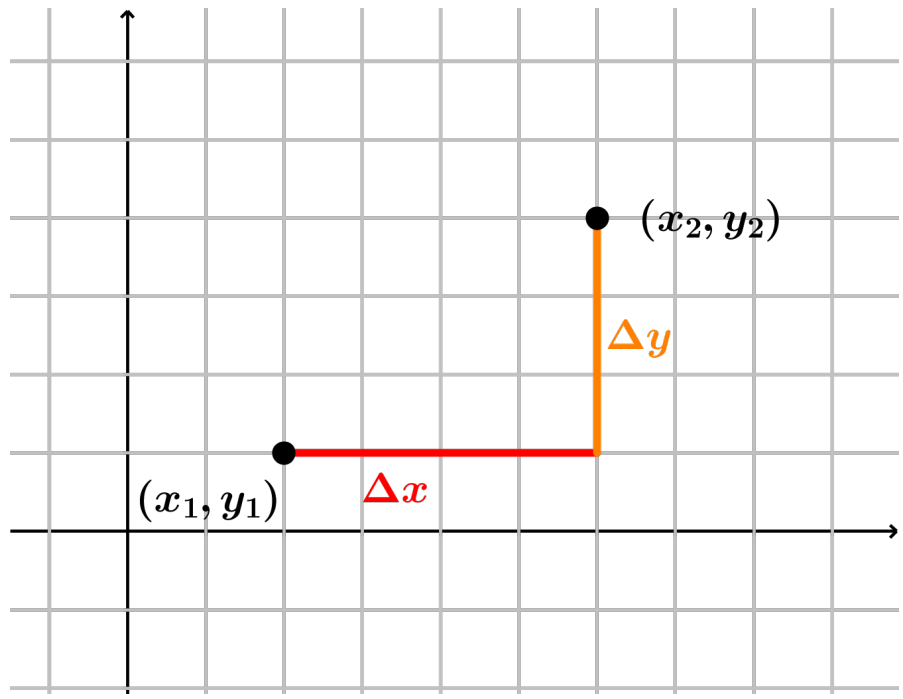
We saw one way to measure change from (x_1, y_1) to (x_2, y_2)



Distance Between Points

We saw one way to measure change from (x_1, y_1) to (x_2, y_2)
We measured the change in x (Δx) and change in y (Δy)



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We saw one way to measure change from (x_1, y_1) to (x_2, y_2)
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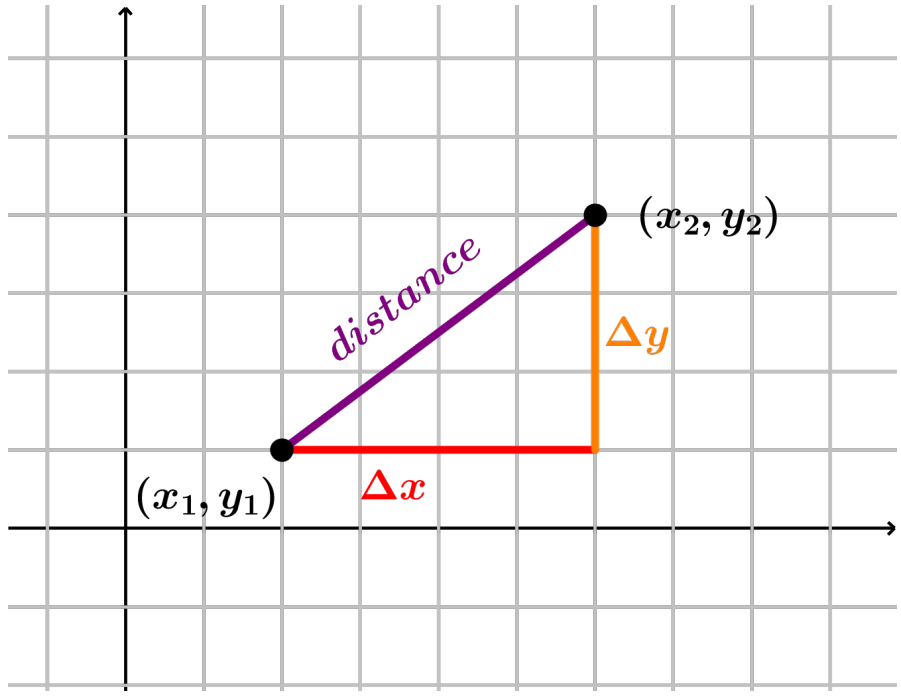
We can also look at the distance between the points



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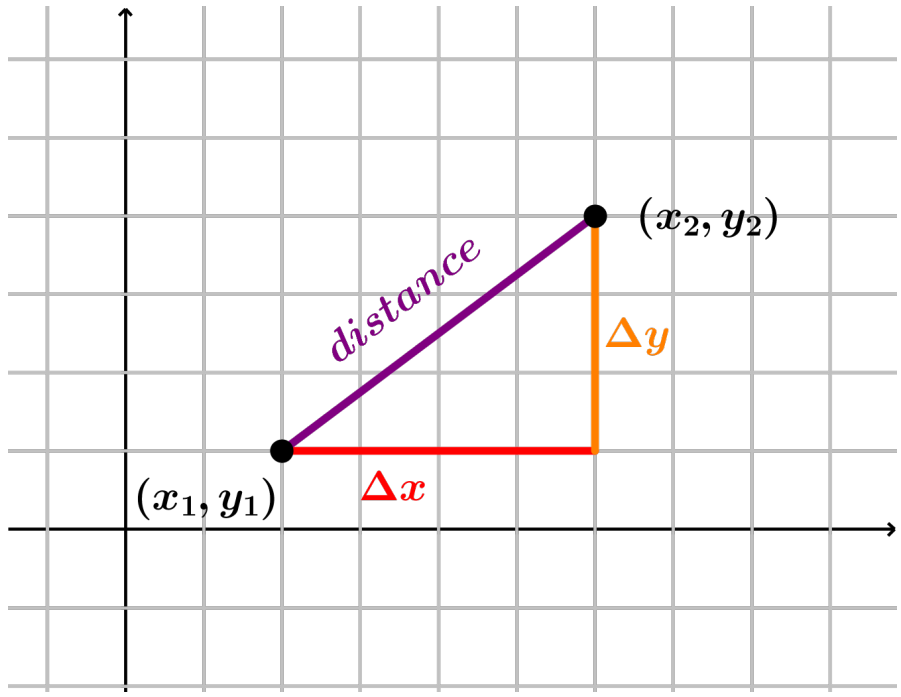

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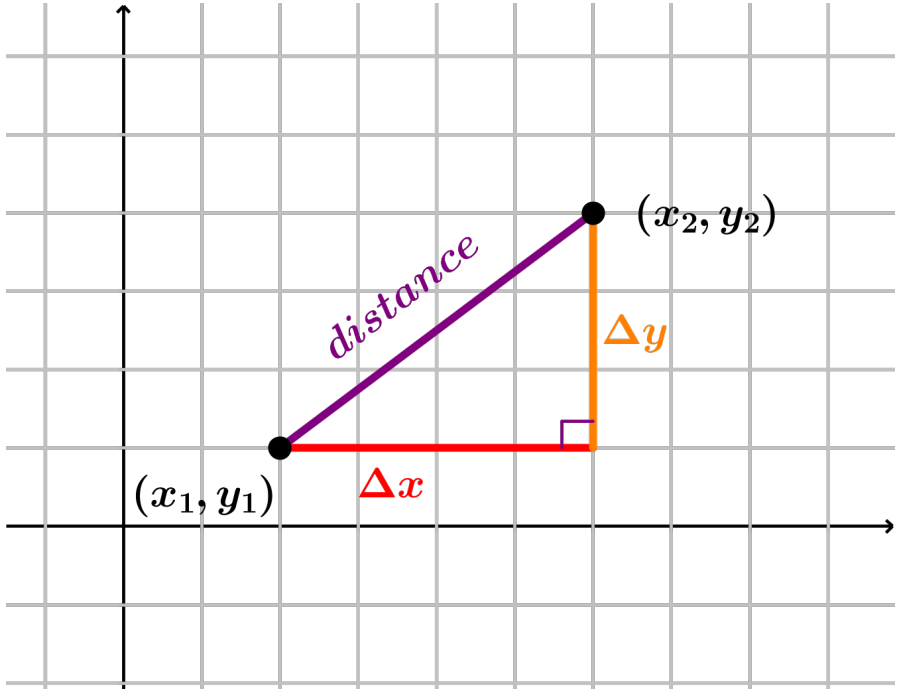

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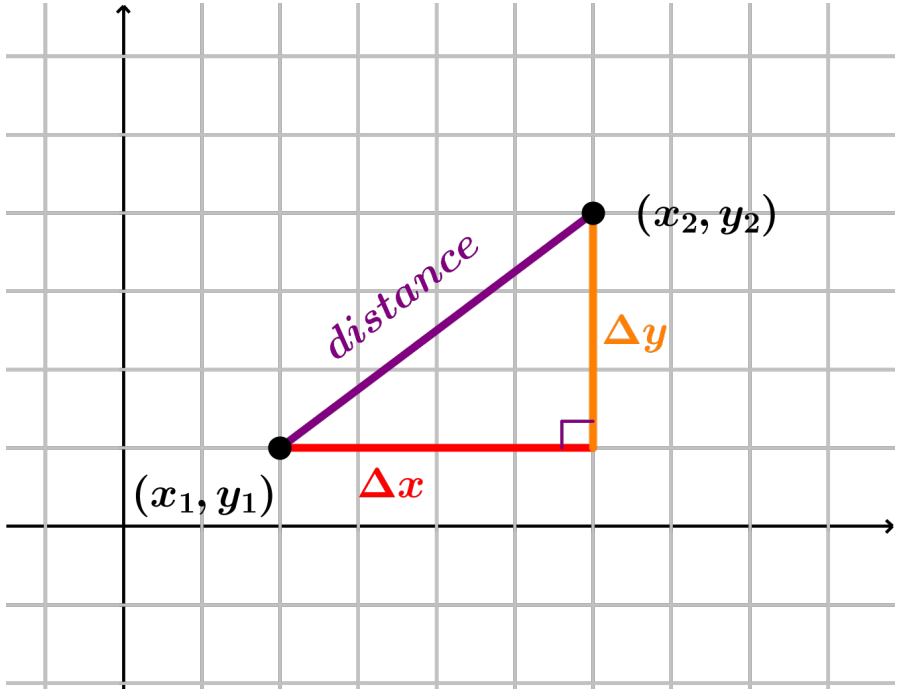

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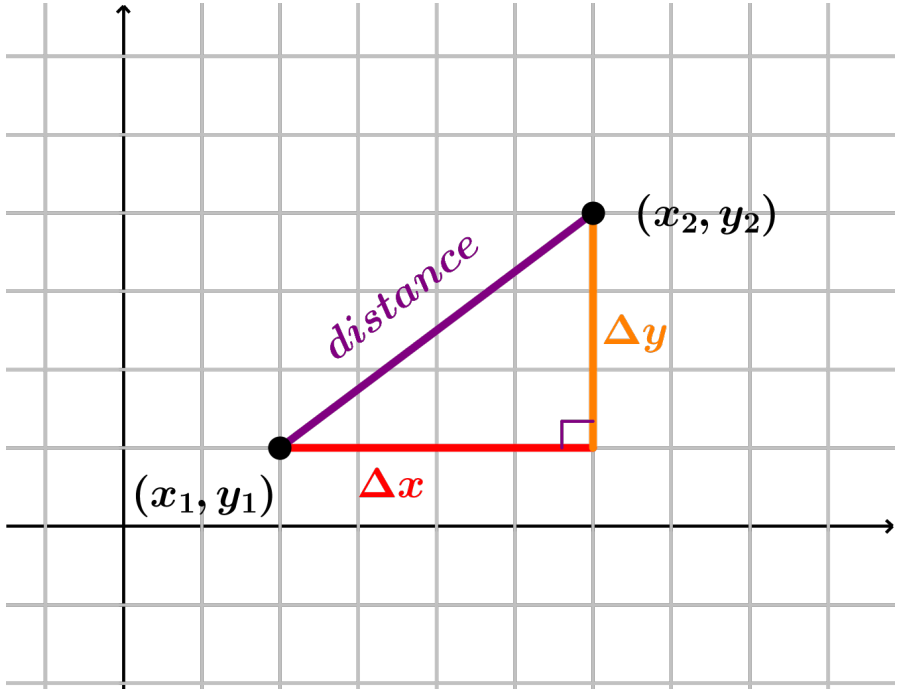
In this case, the *distance* $= h$; $\Delta x = a$, and $\Delta y = b$



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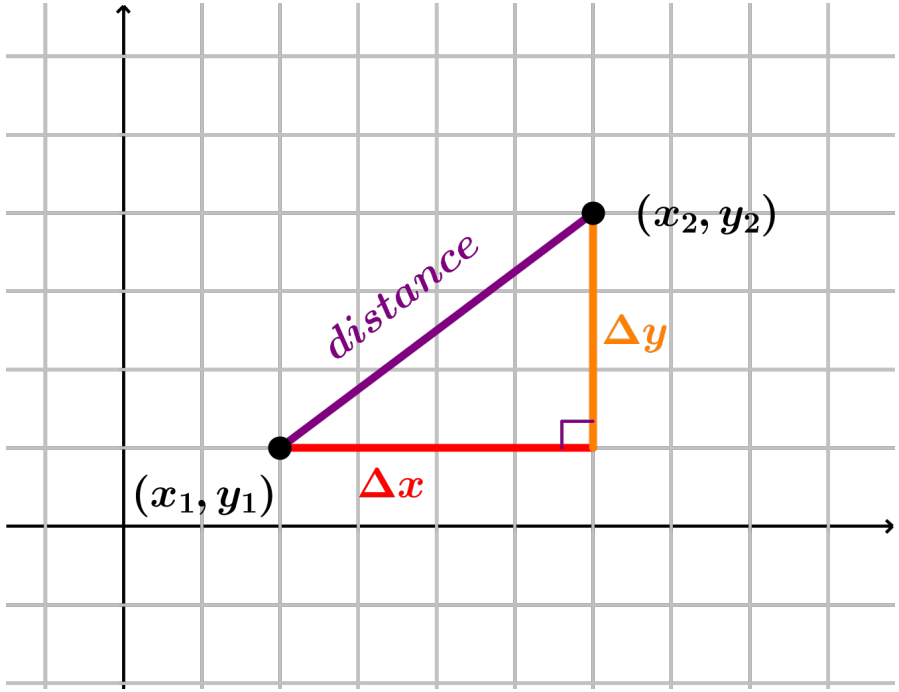

Conclusion: $distance^2 = \Delta x^2 + \Delta y^2$