

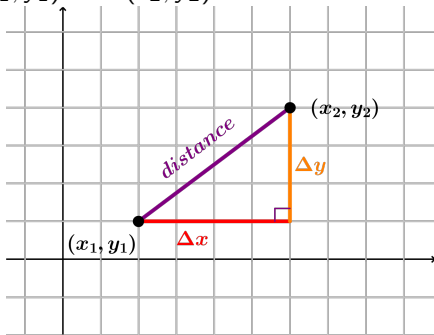
Different Formulas for Distance Between Points

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We can use the [▶ Pythagorean Theorem](#) to find the distance between the points (x_1, y_1) and (x_2, y_2)

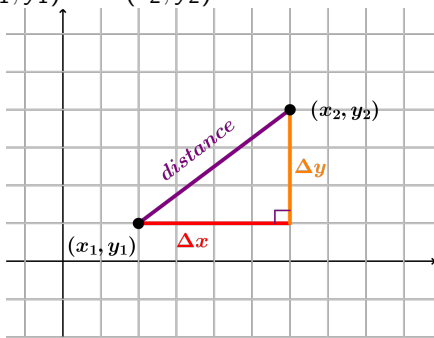
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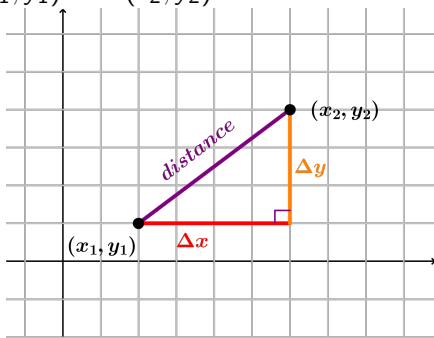
We can use the ▶ Pythagorean Theorem to find the distance between the points (x_1, y_1) and (x_2, y_2)



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

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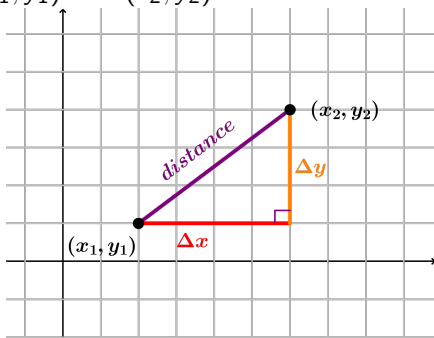


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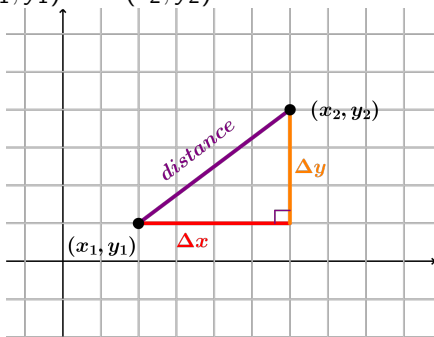
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$$\text{distance} = \sqrt{\Delta x^2 + \Delta y^2}$$

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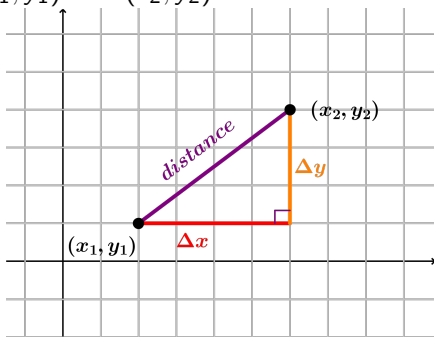
$$\Delta x = x_2 - x_1$$

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Since

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We can re-write the formula as:

$$distance = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$