

Calcular la distancia entre los puntos $P = (4, -2)$ y $Q = (-2, 6)$

$$\begin{aligned} d(A, B) &= \sqrt{(x_a - x_b)^2 + (y_a - y_b)^2} \\ &= \sqrt{(4 - (-2))^2 + (-2 - 6)^2} \\ &= \sqrt{6^2 + (-8)^2} \\ &= \sqrt{36 + 64} \\ &= \sqrt{100} \\ &= 10 \end{aligned}$$

$A(-3, -2)$, $B(2, 1)$ y $C(2, -2)$

$$\begin{aligned} d(A, B) &= \sqrt{(-3 - 2)^2 + (-2 - 1)^2} \\ &= \sqrt{(-5)^2 + (-3)^2} \\ &= \sqrt{25 + 9} \\ &= \sqrt{34} \end{aligned}$$

I) La distancia $d_{AB} = \sqrt{34}$ ✓

II) La distancia $d_{BC} = 5$ ✗

III) Los puntos son los vertices de un triángulo rectángulo ✓

$$A(-3, -2), B(2, 1) \text{ y } C(2, -2)$$

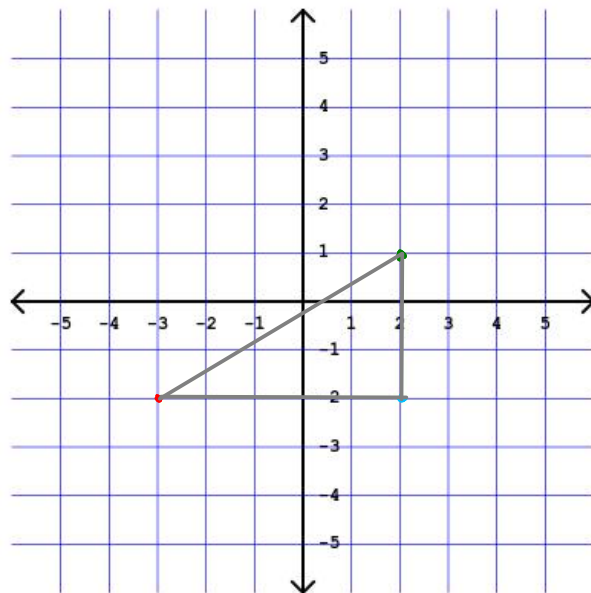
$$d(B, C)^2 = (2-2)^2 + (1+2)^2$$

$$= 0^2 + 3^2$$

$$= \sqrt{9}$$

$$= 3$$

$$A(-3, -2), B(2, 1) \text{ y } C(2, -2)$$



Si $\cos(t) = 0.5$ ● ●

Si $\sin(t) = 0.5$ y $\cos(t) = -\frac{\sqrt{3}}{2}$

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Si $\sin(t) = 0.5$

Para $P(-\frac{5\pi}{4})$

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Si $\cos(t) = -\frac{\sqrt{3}}{2}$

