



$$\begin{aligned}
 d(A, B) &= \sqrt{(x_a - x_b)^2 + (y_a - y_b)^2} \\
 &= \sqrt{(-1 - 1)^2 + (1 - 2)^2} \\
 &= \sqrt{(-2)^2 + (-1)^2} \\
 &= \sqrt{4 + 1} \\
 &= \sqrt{5}
 \end{aligned}$$

$$\begin{aligned}
 d(A, C) &= \sqrt{(x_a - x_c)^2 + (y_a - y_c)^2} \\
 &= \sqrt{(-1 - 2)^2 + (1 + 1)^2} \\
 &= \sqrt{(-3)^2 + 2^2} \\
 &= \sqrt{9 + 4} \\
 &= \sqrt{13}
 \end{aligned}$$

$$\begin{aligned}
 d(B, C) &= \sqrt{(x_b - x_c)^2 + (y_b - y_c)^2} \\
 &= \sqrt{(1 - 2)^2 + (2 + 1)^2} \\
 &= \sqrt{(-1)^2 + 3^2} \\
 &= \sqrt{1 + 9} \\
 &= \sqrt{10}
 \end{aligned}$$

Sea t un número real. Sabiendo que $\cos(t) = \frac{2}{5}$, calcular el valor de $2\sin^2(-t + \pi) - 2$

$$\sin(-t + \pi) = -\sin(t)$$

$$-2(-\sin^2(t) + 1)$$

$$\text{Como } \cos^2(t) + \sin^2(t) = 1 \Rightarrow \cos^2(t) = -\sin^2(t) + 1 \therefore$$

$$-2(\cos^2(t))$$

$$-2(\cos(t))$$

$$-2 \cdot \frac{2}{5}$$

$$-\frac{4}{5}$$