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$$A(-1, -2), B(3, 0), C(-1, 2), D(-3, 0)$$

$$\begin{aligned} AB &= \sqrt{(1+1)^2 + (0+2)^2} \\ &= \sqrt{2^2 + 2^2} \\ &= \sqrt{4+4} \\ &= \sqrt{8} \\ &= \sqrt{2 \times 2 \times 2} \\ &= 2\sqrt{2} \end{aligned}$$

$$\begin{aligned} BC &= \sqrt{(-1-1)^2 + (2-0)^2} \\ &= \sqrt{(-2)^2 + 2^2} \\ &= \sqrt{4+4} \\ &= \sqrt{8} \\ &= \sqrt{2 \times 2 \times 2} \\ &= 2\sqrt{2} \end{aligned}$$

$$\begin{aligned} CD &= \sqrt{(-3+1)^2 + (0-2)^2} \\ &= \sqrt{(-2)^2 + (-2)^2} \\ &= \sqrt{4+4} \\ &= \sqrt{8} \\ &= \sqrt{2 \times 2 \times 2} \\ &= 2\sqrt{2} \end{aligned}$$

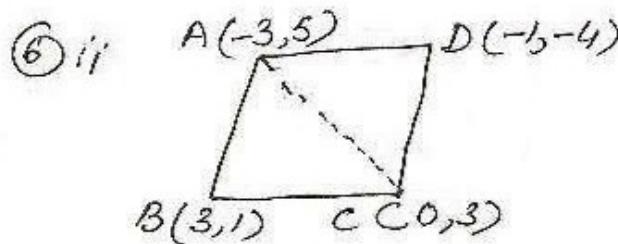
$$\begin{aligned} DA &= \sqrt{(1+3)^2 + (-2-0)^2} \\ &= \sqrt{2^2 + (-2)^2} \\ &= \sqrt{4+4} \\ &= \sqrt{8} \\ &= 2\sqrt{2} \end{aligned}$$

$$\begin{aligned} AC &= \sqrt{(-1+1)^2 + (2+2)^2} \\ &= \sqrt{0^2 + 4^2} \\ &= \sqrt{16} \\ &= 4 \\ BD &= \sqrt{(-3-1)^2 + (0-0)^2} \\ &= \sqrt{(-4)^2 + 0^2} \\ &= \sqrt{16} \\ &= 4 \end{aligned}$$

$$\therefore AB = BC = CD = DA$$

$$\text{and } AC = BD$$

$\therefore \square ABCD$  is a square



$$\begin{aligned} AB &= \sqrt{(3+3)^2 + (1-5)^2} \\ &= \sqrt{6^2 + (-4)^2} \\ &= \sqrt{36+16} \\ &= \sqrt{52} \\ &= 2\sqrt{13} \end{aligned}$$

$$\begin{aligned} BC &= \sqrt{(0-3)^2 + (3-1)^2} \\ &= \sqrt{(-3)^2 + 2^2} \\ &= \sqrt{13} \end{aligned}$$

$$\begin{aligned} AC &= \sqrt{(0+3)^2 + (3-5)^2} \\ &= \sqrt{9+4} \\ &= \sqrt{13} \end{aligned}$$

$\therefore \triangle ABC$  and hence  $\square ABCD$

$\therefore AC + BC = AB$  cannot be const