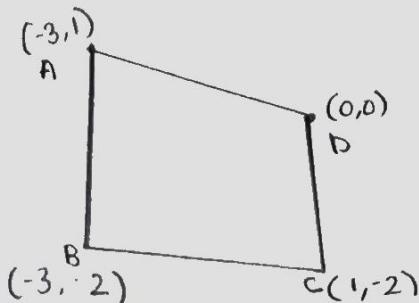


Calculate the lengths of sides and diagonals of given quadrilateral.



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

$$= \sqrt{(-3 - 1)^2 + (-2 - 2)^2}$$

$$= \sqrt{(-4)^2 + 0}$$

$$= \sqrt{16}$$

$$= 4$$

$$CD = \sqrt{(0 - 1)^2 + (0 - 2)^2}$$

$$= \sqrt{(-1)^2 + (2)^2}$$

$$= \sqrt{1 + 4}$$

$$= \sqrt{5}$$

$$AD = \sqrt{(-3 - 0)^2 + (1 - 0)^2}$$

$$= \sqrt{(-3)^2 + (1)^2}$$

$$= \sqrt{9 + 1}$$

$$= \sqrt{10}$$

$$AB = \sqrt{(-3 - -3)^2 + (1 - -2)^2}$$

$$= \sqrt{(0)^2 + (3)^2}$$

$$= \sqrt{9}$$

$$= 3$$

$$BD = \sqrt{(-3 - 0)^2 + (-2 - 0)^2}$$

$$= \sqrt{(-3)^2 + (-2)^2}$$

$$= \sqrt{9 + 4}$$

$$= \sqrt{13}$$

$$AC = \sqrt{(-3 - 1)^2 + (1 - -2)^2}$$

$$= \sqrt{(-4)^2 + (3)^2}$$

$$= \sqrt{16 + 9}$$

$$= \sqrt{25}$$

$$= 5$$