

Find all the possible coordinates for the fourth vertex of a parallelogram with the given vertices.

A (1, 4) B (3, -2) C (7, 2)

Slope:

$$\overline{DC} = \frac{-6}{2} = -3$$

$$\overline{AB} = \frac{-6}{2} = -3$$

$$\overline{AB} = -3$$

$$\overline{CD_2} = \frac{-6}{2} = -3$$

$$\overline{CB} = \frac{4}{4} = 1$$

$$\overline{AD_3} = \frac{4}{4} = 1$$

$D_3(-3, 0)$

$D_1(5, 8)$

$D_2(9, -4)$

