

(12)

or

let $E(x_1, y_1)$ be midpoint of AC

$$x_1 = \frac{-1+2}{2}, \quad y_1 = \frac{-2+5}{2}$$

$$= \frac{1}{2} \qquad = \frac{3}{2}$$

$$\therefore E\left(\frac{1}{2}, \frac{3}{2}\right)$$

let $F(x_2, y_2)$ be midpoint of BD

$$x_2 = \frac{4+(-3)}{2}$$

$$y_2 = \frac{3+0}{2}$$

$$= \frac{1}{2}$$

$$= \frac{3}{2}$$

$$F\left(\frac{1}{2}, \frac{3}{2}\right)$$

\therefore Midpoints of E and F coincide

\therefore $\square ABCD$ is a \parallel gm.

and $AC = BD$

\parallel gm $ABCD$ is a rectangle