

Warm Up

11/15/22

Using Slopes to Find Missing Vertices

Find the coordinates of the missing vertex in the parallelogram ABCD with vertices $A(1, -2)$, $B(-2, 3)$, and $D(5, -1)$.

Step 1: Graph the points.

Step 2: Find the slope of \overline{AB} by counting units from A to B .

The rise is _____ The run is _____ Slope =

Step 3: Start at D and count the same number of units.

Label (,) as vertex C .

Step 4: Use the slope formula to verify that $\overline{BC} \parallel \overline{AD}$.

Slope of \overline{BC} = Slope of \overline{AD} =

\therefore The coordinates of vertex C are (,).

