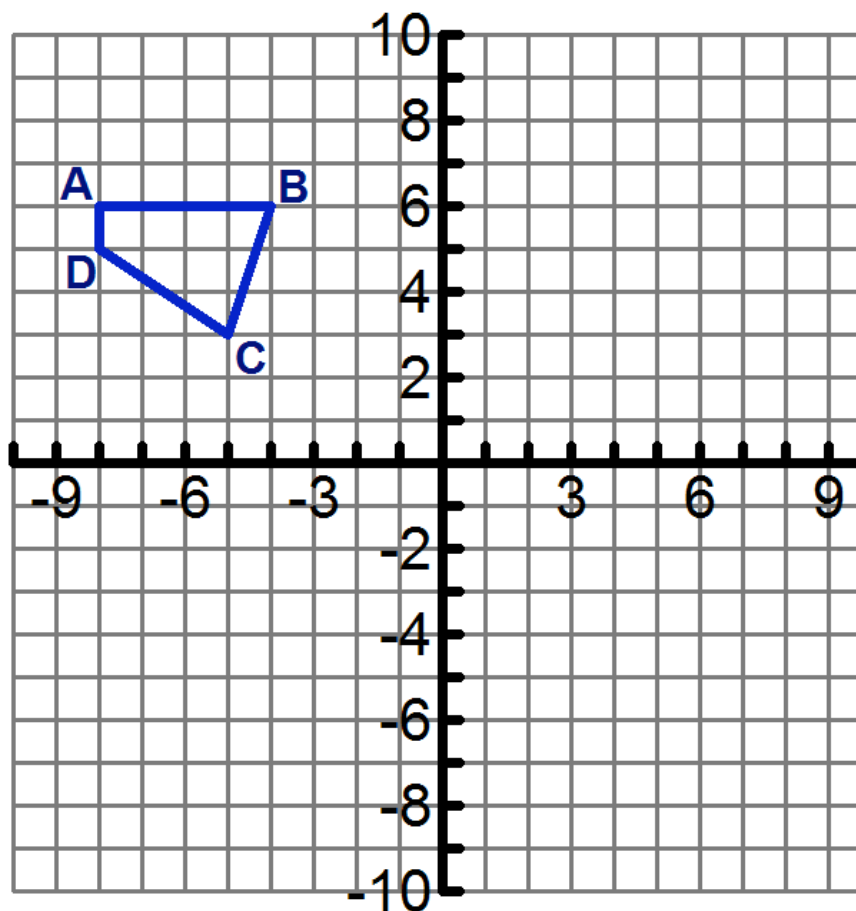


TASK 2.8.1: REFLECTIONS**Solutions**

I: Given the figure ABCD pictured on the graph below, find the following slopes and describe how you determined them.

1. What is the slope of the line segment AB? **0**; The line segment AB is horizontal and thus has slope 0.
2. What is the slope of the line segment BC? **3**; One might use the formula to determine slope $m = \frac{y_2 - y_1}{x_2 - x_1}$. Using the point B=(x_1, y_1)=(-4, 6) and C=(x_2, y_2)=(-5, 3), we see the slope is 3.
3. Use a different method to find the slope of line CD. You can see that the slope is 2/3 by examining the change in the y-values compared to the change in the x-values in the graph.
4. What is the slope of the line segment AD? **Undefined**; Vertical lines have undefined slope.



Teaching notes

Encourage students to use various methods to find slope and justify their methods.

TASK 2.8.1: REFLECTIONS

I: Given the figure ABCD pictured on the graph below, find the following slopes and describe how you determined them.

1. What is the slope of the line segment AB?
2. What is the slope of the line segment BC?
3. Use a different method to find the slope of line segment CD.
4. What is the slope of the line segment AD?

