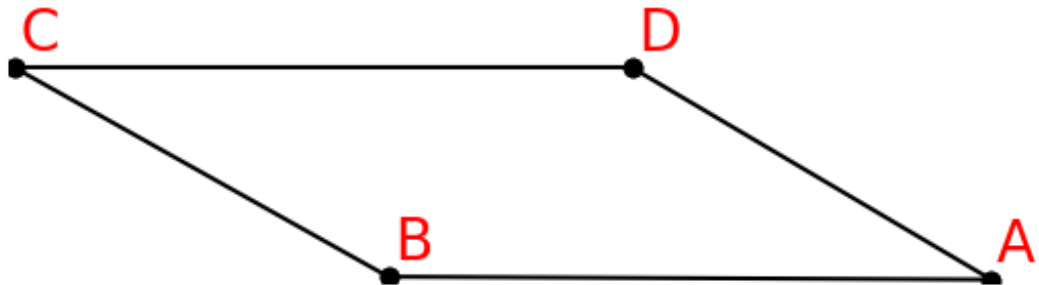


USER:

Find the area of the parallelogram.

USER:



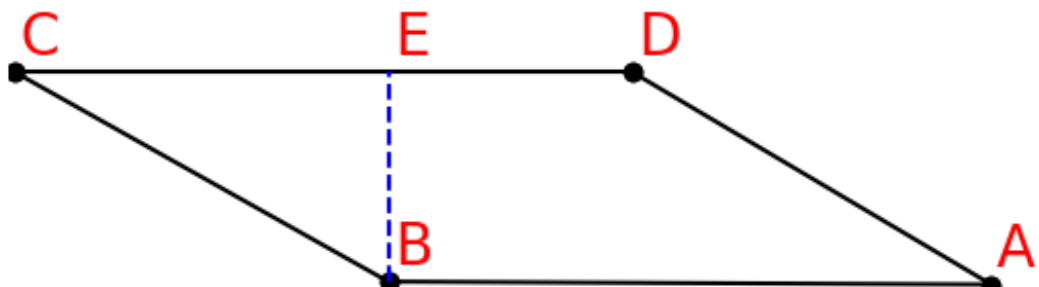
ASSISTANT:

THOUGHT 0: We're asked to find the area of the parallelogram. We know from the logic statements that $AB = 36$ and $AD = 22$. From the diagram, it appears that AD is being used as the base, so we need the height corresponding to that base. Since BE is perpendicular to CD and E lies on line CD , BE serves as the height of the parallelogram.

ASSISTANT:

THOUGHT 1: We'll draw the auxiliary line BE to make the height visually clear. This line drops from point B perpendicularly onto line CD at point E .

ASSISTANT:



ASSISTANT:

THOUGHT 2: Now that BE is drawn, we can compute its length using the coordinates of points B and E . This gives us the height of the parallelogram. The base (AD) is already known to be 22 units.

ASSISTANT:

THOUGHT 3: Using the formula for the area of a parallelogram ($\text{Area} = \text{base} \times \text{height}$), we compute the result as $22 \times 18 = 396$.

ASSISTANT:

ANSWER: The area of the parallelogram is approximately 396.00. TERMINATE
