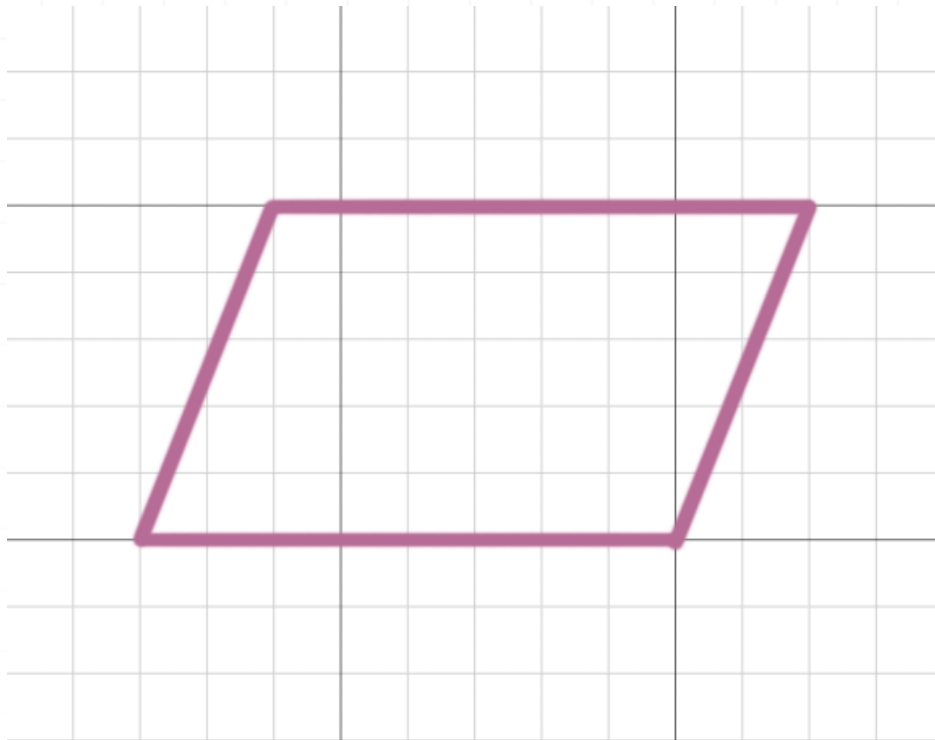


**Topic:** Area of a parallelogram

**Question:** What is the area of the parallelogram, assuming that the lines in the grid are each 1 cm apart?

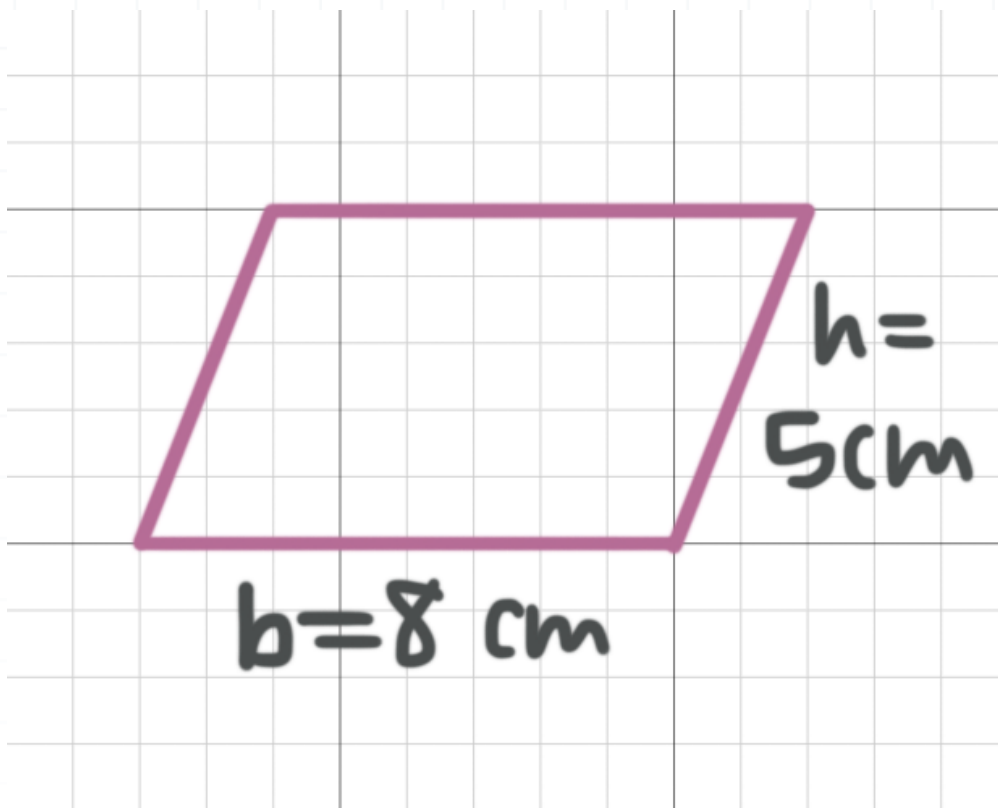
**Answer choices:**

- A      $26 \text{ cm}^2$
- B      $32 \text{ cm}^2$
- C      $38 \text{ cm}^2$
- D      $40 \text{ cm}^2$



**Solution: D**

In the figure, we see that the base of the parallelogram is 8 cm and the height is 5 cm.



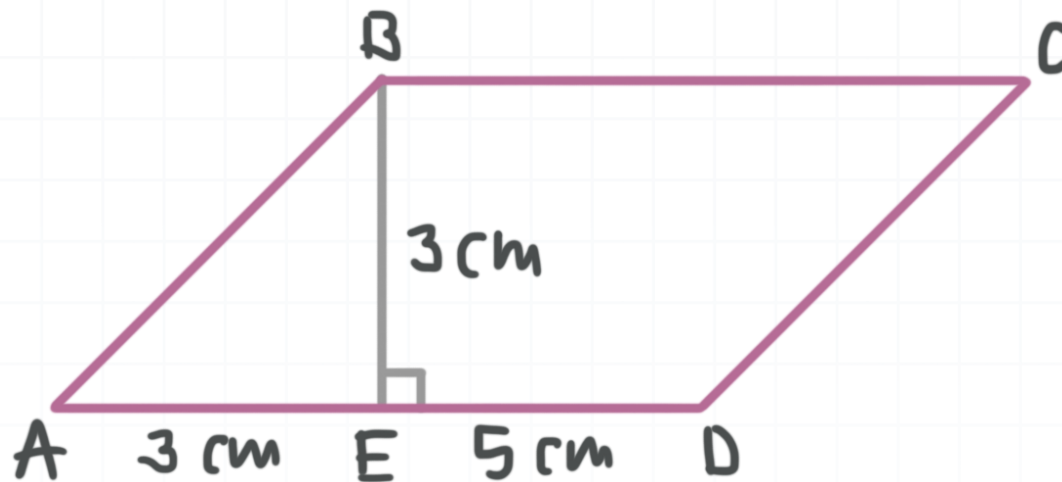
Plugging these dimensions into the area formula, we get

$$A = bh$$

$$A = (8 \text{ cm})(5 \text{ cm})$$

$$A = 40 \text{ cm}^2$$



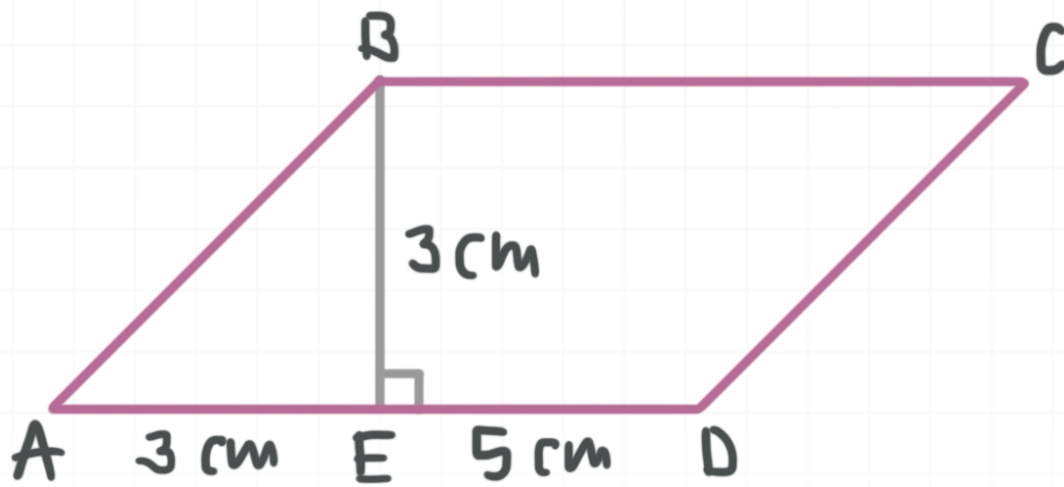
**Topic:** Area of a parallelogram**Question:** What is the area of the parallelogram?**Answer choices:**

- A      $9 \text{ cm}^2$
- B      $12 \text{ cm}^2$
- C      $24 \text{ cm}^2$
- D      $35 \text{ cm}^2$



**Solution: C**

In the figure, we see that the base of the parallelogram is  $3 + 5 = 8$  cm and the height is 3 cm.



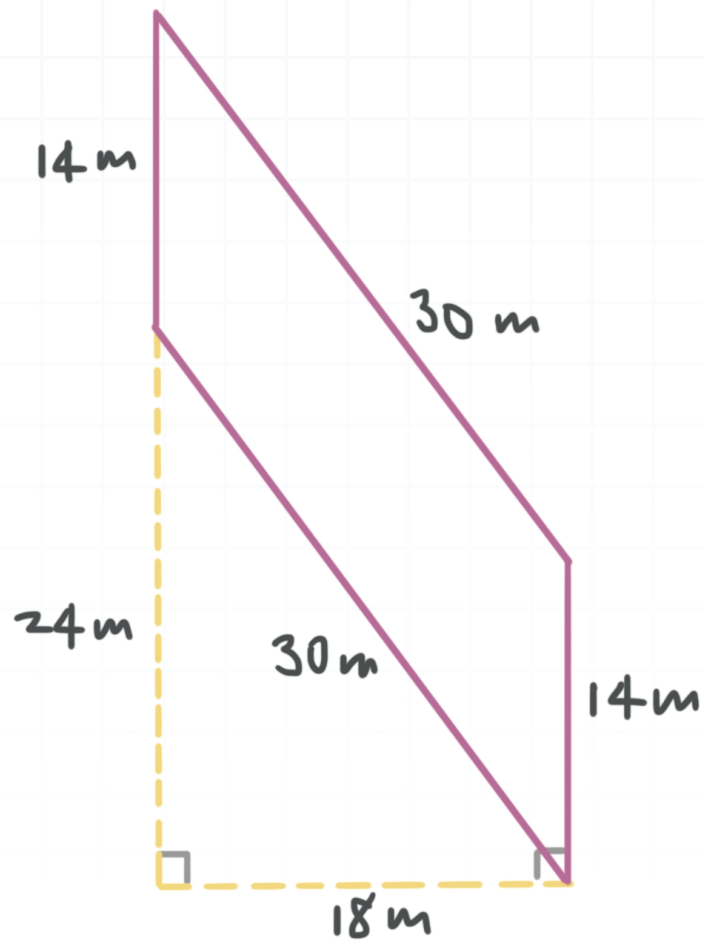
Plugging these dimensions into the area formula, we get

$$A = bh$$

$$A = (8 \text{ cm})(3 \text{ cm})$$

$$A = 24 \text{ cm}^2$$



**Topic:** Area of a parallelogram**Question:** What is the area of the parallelogram?**Answer choices:**

- A 252 m<sup>2</sup>
- B 420 m<sup>2</sup>
- C 432 m<sup>2</sup>
- D 720 m<sup>2</sup>



**Solution: A**

Imagine rotating the parallelogram until the 14 m side that started out on the left is horizontal (and becomes the base). From that base, the height to the opposite 14 m side is 18 m.

$$A = bh$$

$$A = (14 \text{ m})(18 \text{ m})$$

$$A = 252 \text{ m}^2$$

