Answers and talk notes

Determine the Area of Parallelograms and Rhombuses

What your student is learning

Tonight we find the area of a parallelogram. A parallelogram is a slanted four-sided shape, like a leaning rectangle. We use the rule: area = base × height.

Answers

Ask your student to explain before you look.

1. **B.** The straight-up distance from the base to the opposite side. The straight-up distance from the base to the opposite side is the height, at a right angle to the base.
2. **A.** 24 cm^2. A = b × h = 6 × 4 = 24 cm^2.
3. **C.** 45 in^2. A = 9 × 5 = 45 in^2. The slanted side is not used.
4. **D.** 8 × 3. Area = base × height, so the expression is 8 × 3.
5. **B.** B, 45 square units. B, 45 square units: A is 7 × 6 = 42 and B is 5 × 9 = 45.

Talk about it

Which measurement is the height: the slanted side or the straight-up distance? How do you know?

Home mission

A different situation: stack 10 or more cards or sticky notes into a neat block. Look at it from the side. Now push the top sideways so the stack leans. Did the base or the height change? Did the amount of paper change?

When they are stuck, ask

- Which number is the height — the straight-up one or the slanted side?
- Let's write the rule first: area = base × height.
- What is the base times the height?

Try not to say

- Use the slanted side as the height.
- Add the base and the height together.
- Just memorize the answer.