Answers and talk notes

Determine the Area of Trapezoids

What your student is learning

Tonight we find the area of a trapezoid. A trapezoid is a four-sided shape with one pair of parallel sides. Those two sides are the bases, and they have different lengths.

Answers

Ask your student to explain before you look.

1. **B.** The two parallel sides. The two parallel sides are the bases of a trapezoid.
2. **A.** 10. b1 + b2 = 4 + 6 = 10.
3. **C.** 24 square units. A = ½ × (5 + 7) × 4 = ½ × 12 × 4 = 24 square units.
4. **D.** A = ½ × (b1 + b2) × h. The area of a trapezoid is A = ½ × (b1 + b2) × h.
5. **C.** 50 square units. A = ½ × (8 + 12) × 5 = 10 × 5 = 50 square units.

Talk about it

What does the ½ at the start of the formula tell you to do?

Home mission

Look for a trapezoid at home: a tote bag side, a lampshade, or a roof in a picture. Pretend the top is 3 feet, the bottom is 7 feet, and the height is 4 feet. Can your student explain each step out loud?

When they are stuck, ask

- What are the two bases? Let's add them first.
- Did we remember to take half at the end?
- Read the steps out loud: add, multiply, then take half.

Try not to say

- Just use one base instead of both.
- You don't need the half — just multiply.
- Multiply the two bases together.