Determine the Area of Trapezoids

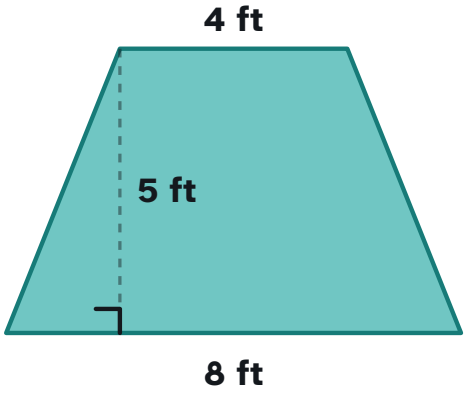
Find the area of a trapezoid by adding its two bases, multiplying by the height, and taking half.

Name _____ **Date** _____

Tonight's spark

A corner store has a trapezoid window. The top is 4 feet, the bottom is 8 feet, and it is 5 feet tall. How many square feet of glass is that?

Guess first: is the window more or less than 40 square feet?



Our class model: add, multiply, take half

Try it

Work it out on paper. Write one answer on each line.

1 **Which sides are the bases of a trapezoid?**

A. The two slanted sides **B.** The two parallel sides **C.** The two shortest sides
D. Any two neighboring sides

My answer _____

2 **A trapezoid has bases of 4 and 6. What is b1 + b2?**

A. 10 **B.** 24 **C.** 2 **D.** 46

My answer _____

3 **A trapezoid has bases of 5 and 7 and a height of 4. What is its area?**

A. 48 square units **B.** 12 square units **C.** 24 square units

My answer _____

4 **Which formula gives the area of a trapezoid?**

A. A = b1 × b2 × h **B.** A = b1 + b2 + h **C.** A = (b1 + b2) × h **D.** A = ½ × (b1 + b2) × h

My answer _____

5 **A trapezoid has bases of 8 and 12 and a height of 5. What is its area?**

A. 100 square units **B.** 25 square units **C.** 50 square units **D.** 60 square units

My answer _____

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?

If we get 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.

Do it on a screen

Scan or type the link. Same lesson, with hints.

eduwonderlab.com/lessons/5-3/homework.html

How did it feel? (optional)

Tricky Getting there Got it