

Tom's dad is looking to re-shingle his roof. The challenge is that the roof includes several sections that are shaped like trapezoids. He knows the area one bundle of shingles will cover, but he can't remember how to find the area of a trapezoid.

One section of roof is shaped like the following trapezoid.



You can place two congruent trapezoids together to form a parallelogram as shown below.



Use this representation to explain how to find the area of a trapezoid and determine a formula for finding the area of any trapezoid.

What is the area of the section of roof shown below? Show how you determined the answer.



