

4.3

**AREA OF
TRAPEZOIDS**

Simplify the expressions

1) $7k + 10 - 4k - 7$

2) $10x + 4.5 - x - 4$

3) $5.7p + 3 - 2.4p - 2p$

Use the Distributive Property to simplify the expression

4) $4(c - 2)$

5) $8(9 + 5x + 7)$

Simplify the expression

6) $2(3 + \boldsymbol{d} - 1)$

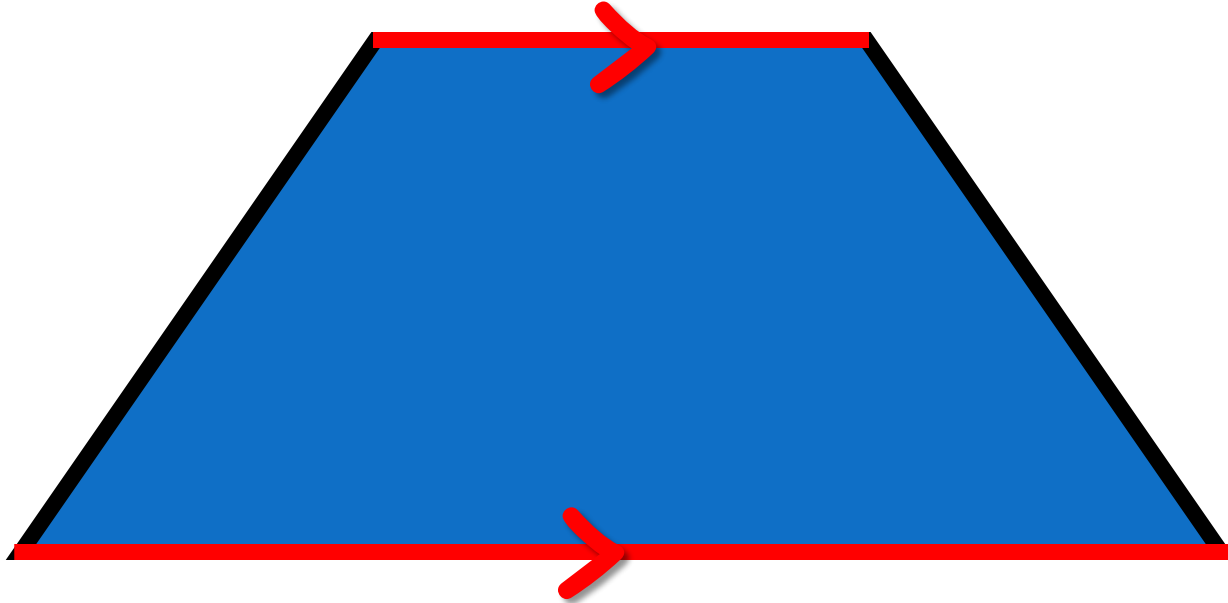
7) $3(\boldsymbol{w} + 1) - 1$

Simplify the expression

8) $3.4n + 9.6 - 2.1$

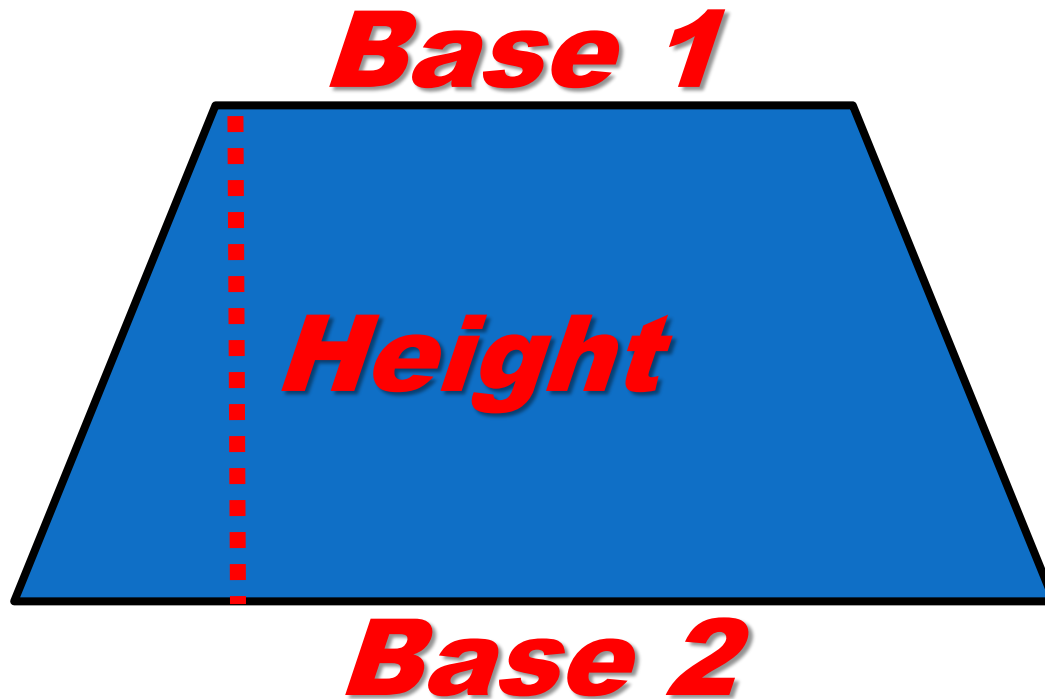
9) $5(k + 4) - 2k$

Trapezoids

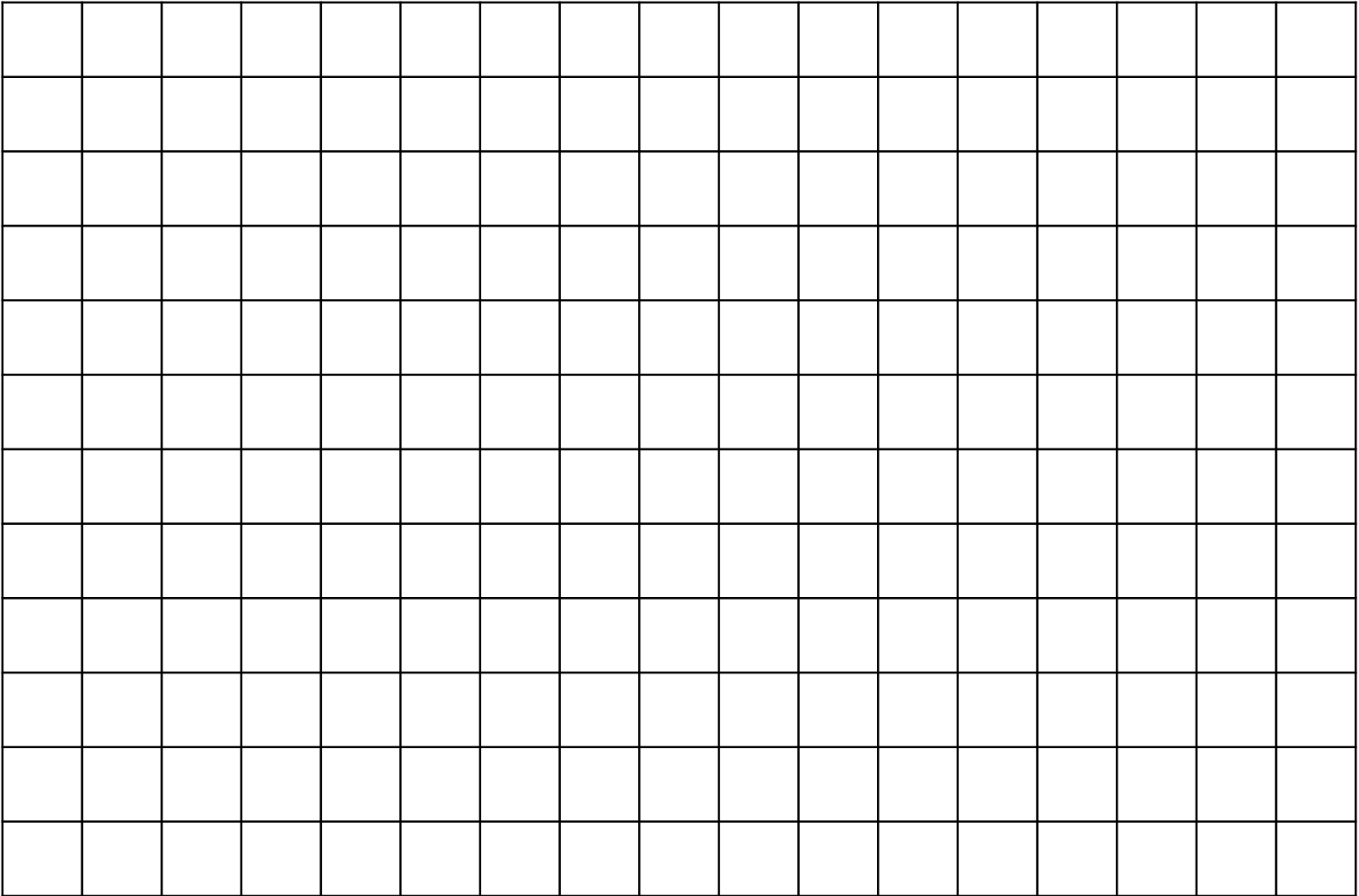


**A trapezoid is a _____ shape with
only _____ of _____ sides.**

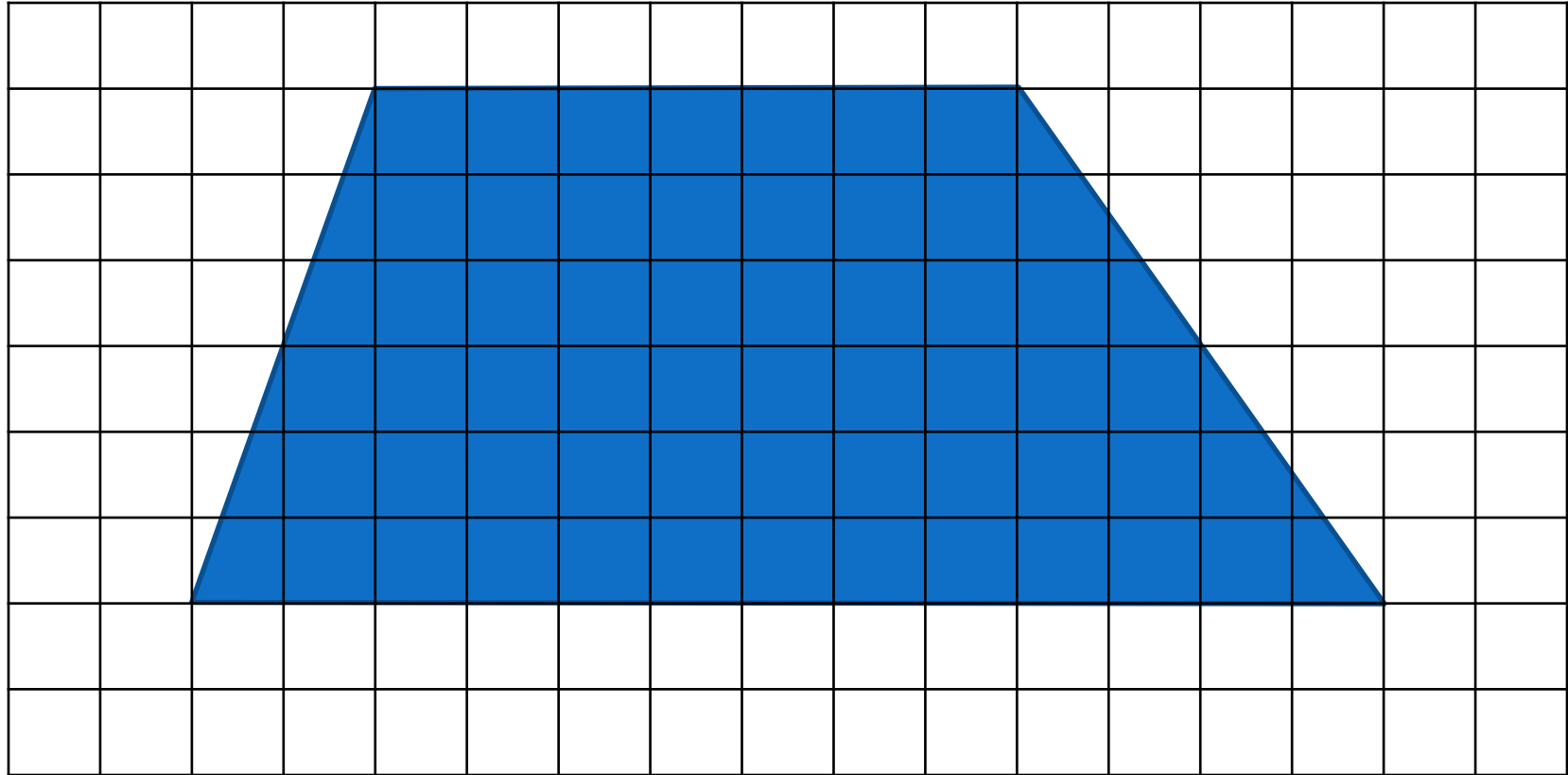
Parts of a Trapezoid



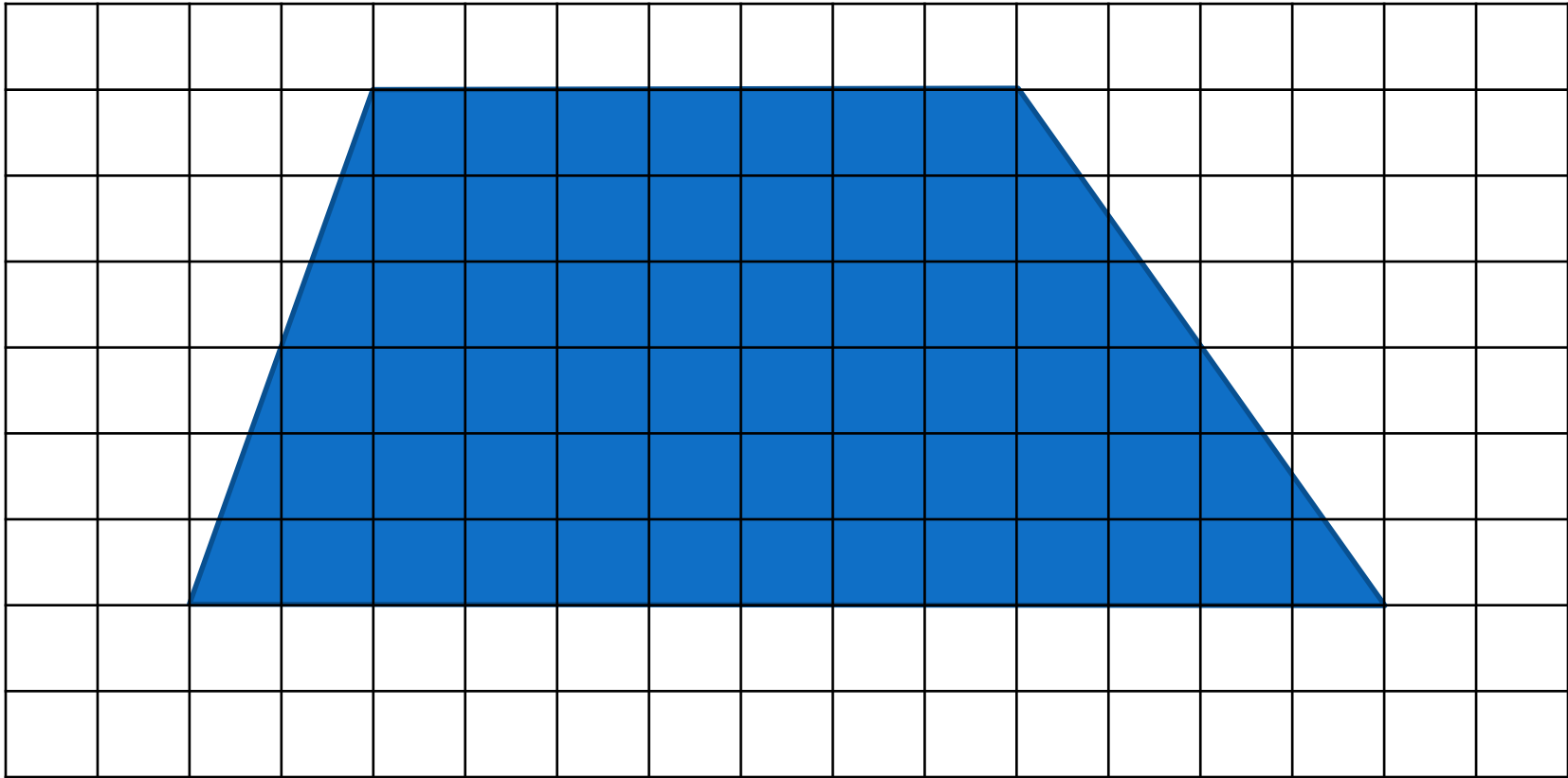
On the graph below, draw 3 different trapezoids.



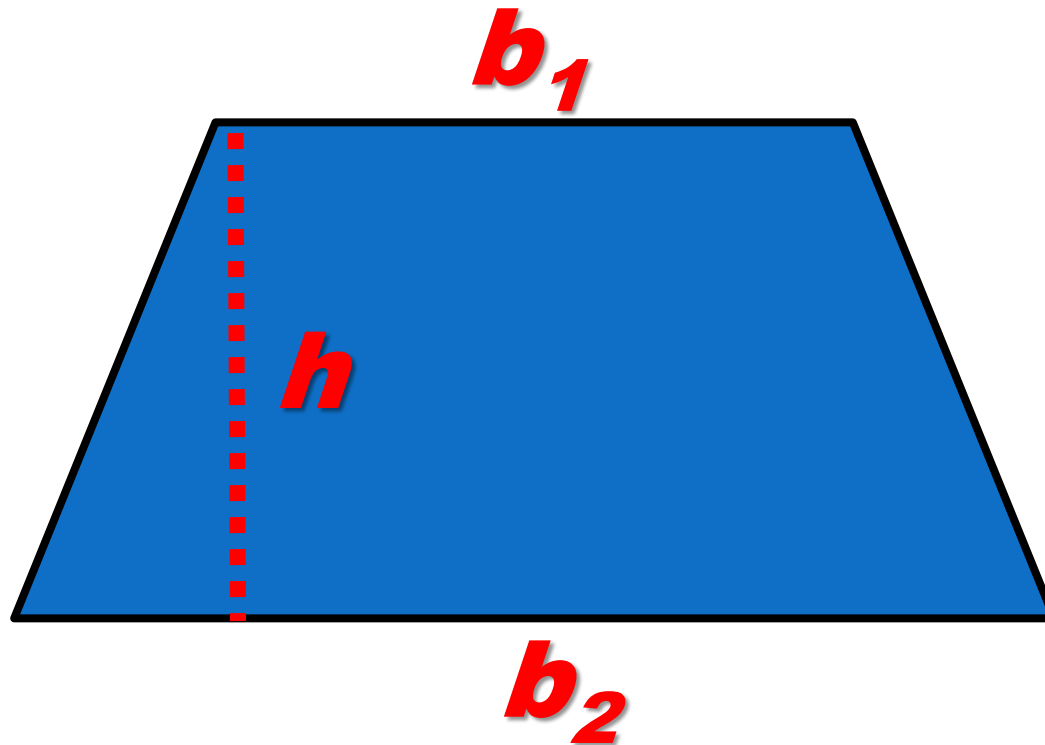
Find the area of the trapezoid, using your knowledge of rectangles, parallelograms, and triangles.



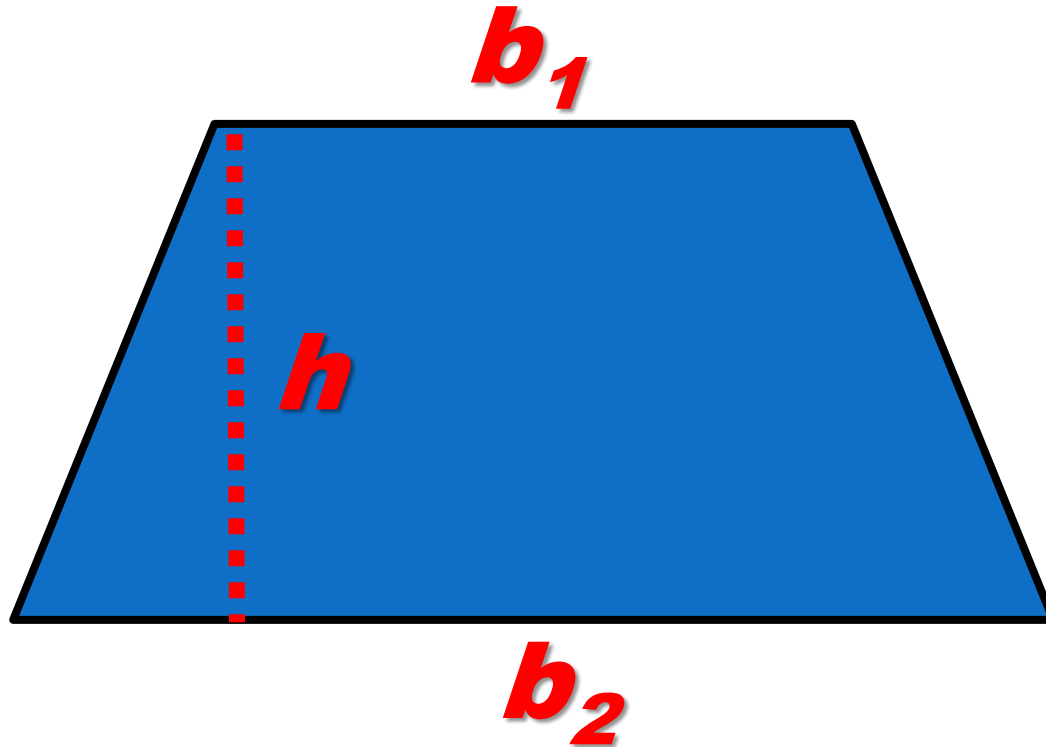
Find the area of the trapezoid by splitting only into two triangles.



Parts of a Trapezoid

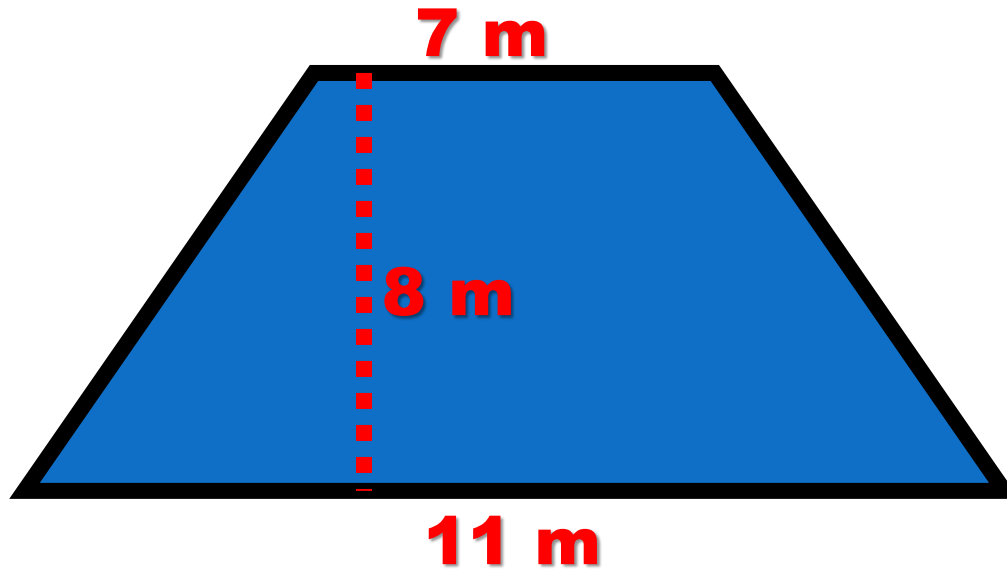


AREA FORMULA FOR A TRAPEZOID

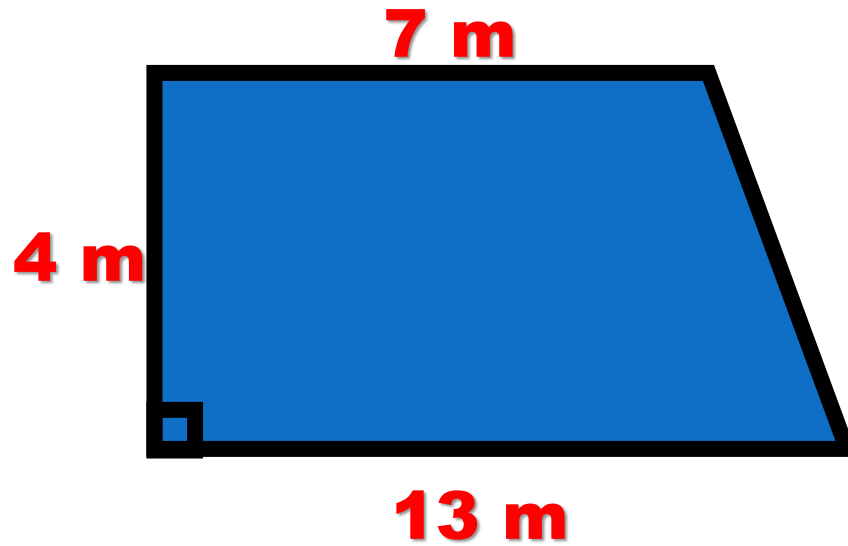


Area =

Example 1: Find the area.

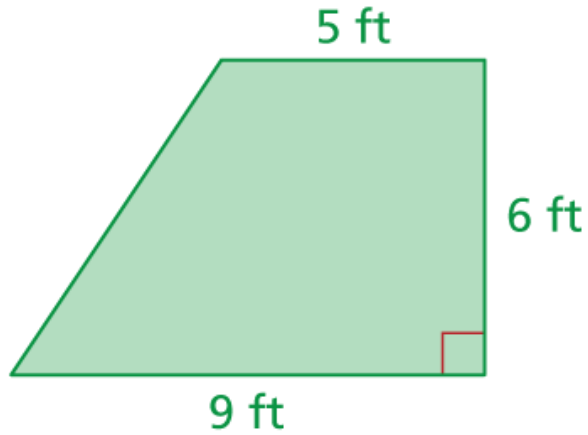


Example 2: Find the area.



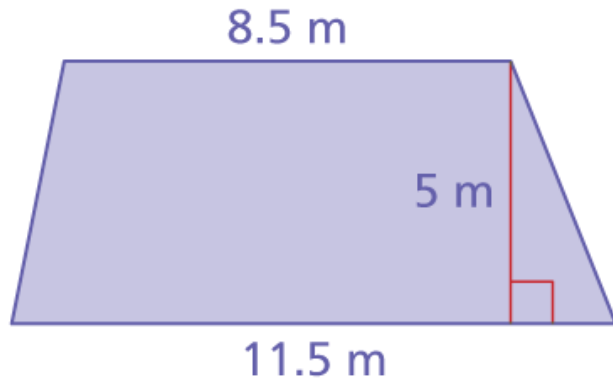
Practice

3) Find the area of each trapezoid.



Practice

4) Find the area of each trapezoid.



Practice

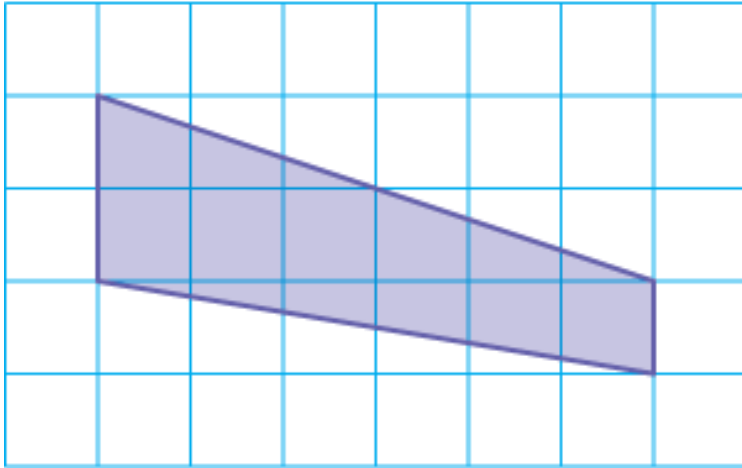
5) What is the area of the trapezoid?

(A) 6 units²

(B) 7 units²

(C) 9 units²

(D) 12 units²



Practice

- 6) You can use a trapezoid to approximate the shape of Scott County, Virginia. The population is about 23,200. About how many people are there per square mile?

