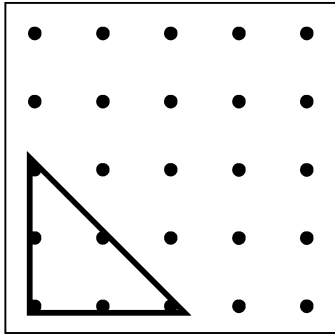


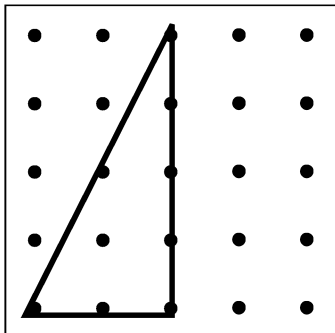
## Finding the Area of a Right Triangle

**1** Build this right triangle on your geoboard. Find the area of the triangle in square units.



Area = \_\_\_\_\_  
How did you figure it out?

**2** Now build this right triangle on your geoboard. Find the area of the triangle in square units.



Area = \_\_\_\_\_  
How did you figure it out?

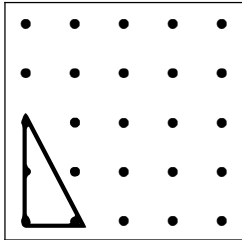
### For discussion:

The formula for finding the area of a right triangle is  $\frac{1}{2}$  base  $\times$  height, or  $\frac{1}{2}bh$ .

- Show how and why this formula works.
- Do you think this formula works for all types of triangles? Why or why not?

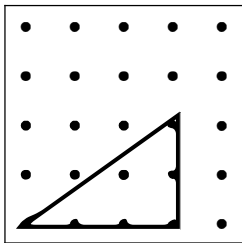
# More Triangles to Measure

**1** Build this right triangle on your geoboard. Find the area of the triangle in square units.



Area = \_\_\_\_\_  
How did you figure it out?

**2** Now build this right triangle on your geoboard. Find the area of the triangle in square units.



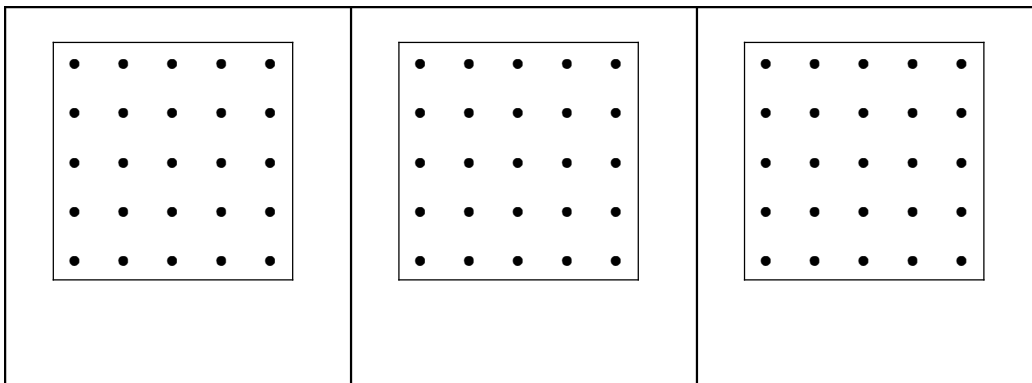
Area = \_\_\_\_\_  
How did you figure it out?

**3** Build 3 right triangles, one with an area of 6 square units, one with an area of 8 square units, and one with an area of  $4\frac{1}{2}$  square units. Record your work below. Use labeled sketches, numbers, and/or words to prove that the area of each triangle you have drawn is correct.

a. 6 square units

b. 8 square units

c.  $4\frac{1}{2}$  square units



**4** The formula for the area of a right triangle is  $\frac{1}{2}$  base  $\times$  height, or  $\frac{1}{2}bh$ . Use labeled sketches, numbers, and words to explain why this works.