

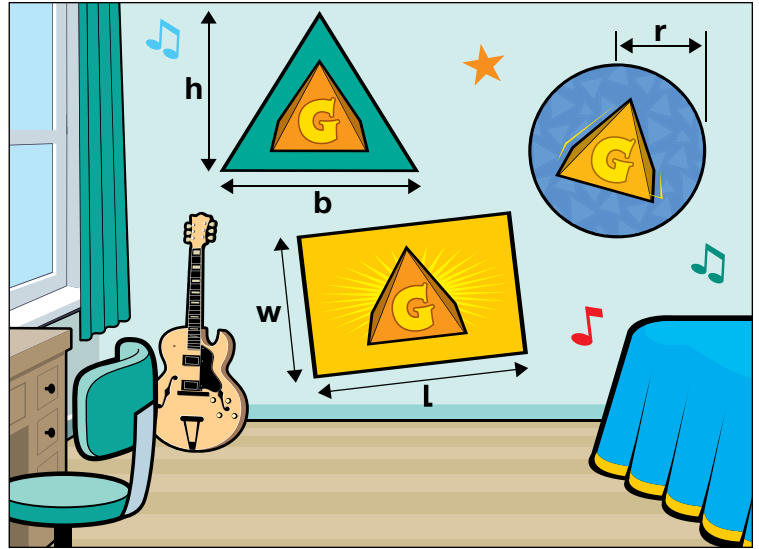
Poster-Crazy

Use what you've learned about perimeter and area to take some measurements in your home. Assume you're going to hang a few Geometrics posters in your room. You'll need a ruler and a calculator.

- 1 Pick a wall and calculate its perimeter and area.

Perimeter:

Area:



- 2 The Geometrics Stage Crew gives you 10 rectangular posters that measure $8\frac{1}{2}$ inches by 11 inches, plus 5 circular posters with a 1-foot radius, and one triangular poster with a base of 3 feet and a height of 3 feet. What is the total area of these posters, and can you estimate how many will fit on your wall at home? **Note:** The conversion box below of feet to inches will help when calculating measurements for this activity and for Activities 2 and 3.

	Area of rectangular posters:	
+	Area of circular posters:	
+	Area of triangular poster:	
=	Total area of posters:	
	Area of your bedroom wall:	
-	Total area of all posters:	
=	Total remaining area on your wall:	

CONVERTING FEET TO INCHES	
Linear Measurement	1 foot = 12 inches
Area Measurement	1 square foot = 144 square inches
Volume/3D Measurement	1 cubic foot = 1,728 cubic inches
FEATURED FORMULAS	
Area of 2D Shapes:	
Rectangle: $A = l \cdot w$	
Triangle: $A = \frac{1}{2} \cdot (b \cdot h)$	
Circle: $A = \pi \cdot r^2$	

NOW TRY THIS:

The Geometrics Stage Crew wants to make some circular welcome mats that promote the band. They have to be the size of a doorway. Measure the width of the entranceway to your bedroom. Using that measurement as the diameter, what would be the circumference and area of these rugs?