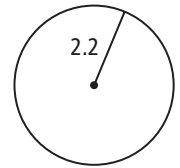


**Classwork: Area and perimeter**

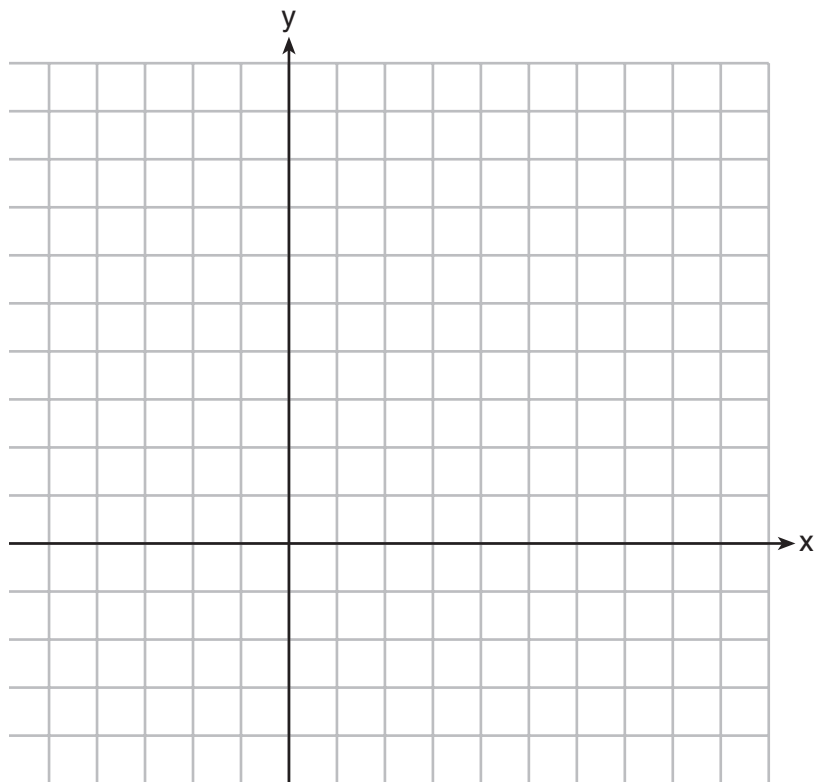
1. A 12-ft-by-15-ft swimming pool has a 3-ft-wide no-slip surface around it. What is the outer perimeter of the no-slip surface? (Sketch the given shape. Label its dimensions)

2. What is the circumference of the circle at the right in terms of pi?



3. Graph the triangle first to answer the following question.

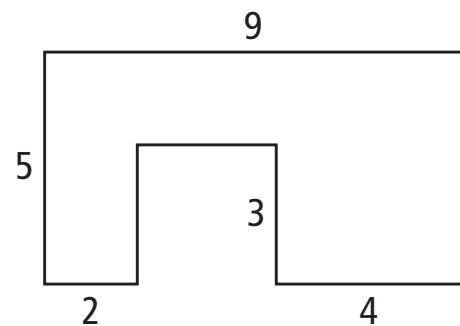
What is the perimeter of  $\triangle PQR$  with vertices  $P(-2, 9)$ ,  $Q(7, -3)$ , and  $R(-2, -3)$  in the coordinate plane?



4. You are tiling a kitchen floor that is 10 ft. wide by 4 yd. long. How many square yards of tile do you need? (careful!)

5. The diameter of circle  $Z$  is 5 in. What is its area in terms of  $\pi$ ?

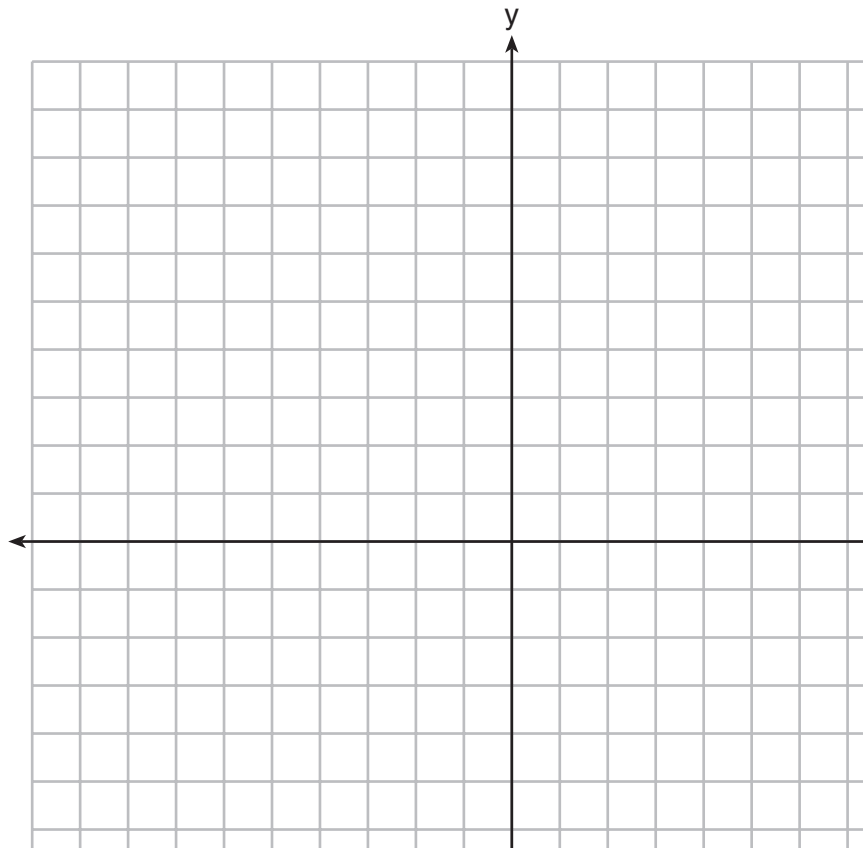
6. All angles in the figure at the right are right angles. What is the area of the figure? (Show your work and calculations)



7. The area of a circle is  $25\pi$  in.<sup>2</sup>. What is its radius?

8. A rectangle has twice the area of a square. The rectangle is 18 in. by 4 in. What is the perimeter of the square?

9. The center of a circle is  $A(-3, 3)$ , and  $B(1, 6)$  is on the circle. Find the area of the circle in terms of  $\pi$ . (Draw the circle and two points first)



On the graph, draw polygon  $ABCDEF$  with vertices  $A(0, 0)$ ,  $B(0, 10)$ ,  $C(5, 10)$ ,  $D(5, 7)$ ,  $E(9, 7)$ , and  $F(9, 0)$ . Find the perimeter and the area of the polygon.

