

Find the area of a circle by evaluating the formula.

Name: _____ Date: _____

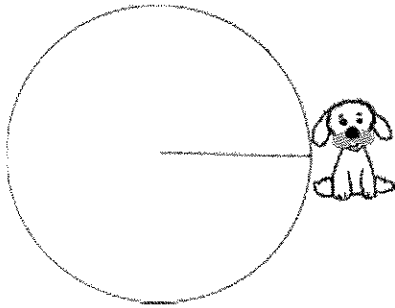
1. A zoo is renovating their exhibit for the lions called The Lion's Lair. They have 3 lions and want at least 380 sq. ft. per lion. The current plan has a circular Lion's Lair with a radius of 23 ft. Will this plan be large enough? Explain your answer below using math and words.



2. Fill in the table below using the formula, $area = \pi r^2$. Show all work in the space below the table.

Radius	Diameter	Area
6 ft.		
	7.25 in.	
	12.4 ft.	
5.4 yd.		

3. The Smiths keep their dog, Fido, on a leash in their backyard. The leash is attached to a metal hook in the center of their yard.



a. How much square feet of grass can Fido walk around in if his leash is 10 feet long?

b. What is the perimeter of his space with a leash that is 10 feet long?

4. George is learning how to draw geometric figures in art class to make a logo. Below is a painting of a logo he created in class today. How much blue paint will he need if the length of the square is 4.75 in.? Explain how you found your answer below using words and math:

