

# Baking

Name \_\_\_\_\_

For each of the following questions, give your answer with some justification or reasoning for why it is correct. Use 3.14 as the value for pi in these problems.

1. Jelena has two cakes that she is getting ready to frost. She has two tubs of frosting: butter cream and chocolate. The tub of chocolate has more frosting, so she wants to use the chocolate on the cake that has the larger surface area on top. One cake is a 16 inch by 8 inch rectangular cake. The other cake is a circular cake with a diameter of 10 inches. Which cake should she frost with chocolate?

---

2. Jimmy made a cake that he just finished frosting. It is a round cake with a radius of 8 inches. He would like to run a strand of red licorice around the circumference of the cake and wonders if the 3 feet of licorice that he has is enough. Is the licorice long enough?

---

3. Tara made 36 cookies that are each 4 inches in diameter. She would like to pair the cookies and put frosting in between to make cookie sandwiches. She needs to know the area that she will be frosting. What is the area of half of the cookies if she puts frosting on half and then sets the other cookies on top of them?

---

4. Larry is making a pizza that is 18 inches in diameter. He is using a recipe that calls for a  $\frac{1}{4}$  pound of cheese for each 40 square inches of pizza. How much cheese does he need to cover the 18-inch pizza?

---

Find the area and circumference of circles

# The Woodshop

Name \_\_\_\_\_

For each of the following questions, write the answer and show your work. Use 3.14 as the value for pi in these problems.

1. Patricia is making 5 stools with circular seats that are each 12 inches in diameter. She wants to paint the tops of all the stools bright red, but needs to know the area she will paint. What is the total area of the tops of all 5 stools?  

---
2. Heather made a round picture frame that is 20 inches in diameter. She wants to wrap a gold ribbon around the outside of the frame one time and needs to know how long the ribbon should be. How long does the ribbon need to be?  

---
3. Troy made some blocks for his younger brother to play with. Eight of the blocks are cylinders, and he would like to glue a yellow ribbon around the top and bottom of each cylinder to decorate them. The radius of each block is 3 centimeters. How much ribbon does he need to complete his project?  

---
4. Robert completed a plant stand that has a round top. The top is 24 centimeters in diameter and is painted gold. He wants to glue a silver trim around the outer edge of the top and needs to know how long the trim should be. How much silver trim does Robert need?  

---
5. Ian is using 15 washers to create a collage for his art class. He is making the collage in his woodshop class, and he wants to cover each of the washers with some gold leaf, but because of the cost of gold leaf, he doesn't want to buy extra. He wants to cover the entire washer, including the center hole. He measures one of the washers and finds the diameter to be 14 millimeters. What is the total area of all the washers that needs to be covered with gold leaf?  

---

Find the area and circumference of circles