Find the circumference of a circle by evaluating the formula. Make sure you answer all questions.

Name: _____ Date: _____

1. The Risky Revolution, a new ride at the state fair, has a diameter of 185 feet. How far do you travel in one revolution? Explain how you found your answer.

2. Dane is helping his dad build a fence around their circular garden. If the garden has a radius of 3 ¼ yards, how many yards of fencing will they need? Show your work and explain how you found your answer.

3. Fill in the tables below.

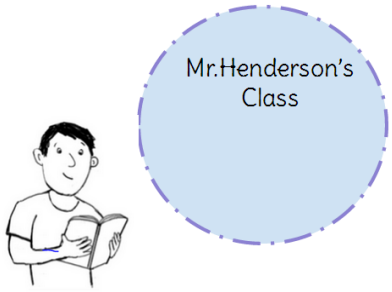
Radius	$C = 2\pi r$	Calculations	Answers
12.5 ft.			
17.4 in.			

Diameter	$C = D\pi$	Calculations	Answer
25 ft.			
34.8 in.			

Describe the relationship between the two formulas for the circumference of a circle.

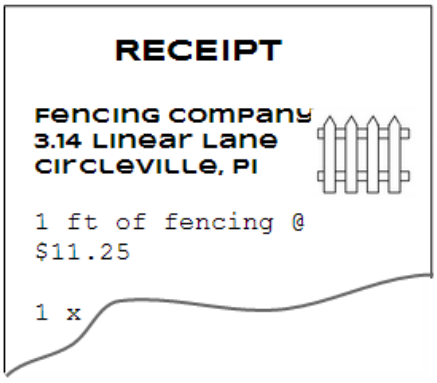
4. Jessica is helping her math teacher, Mr. Henderson, redo his circular bulletin board in his classroom. They have the following borders:

- 18 ft. of a red border
- 9 ft. of a yellow border
- 7.6 ft. of a blue border.



a. If the bulletin board has a radius of 2 ¾ ft., what color border should Jessica use? You're your work and explain how you found your answer and your thinking below

5. George recently bought fencing for his neighbor's circular garden. He needs to keep record of all of his expenses for the project so he can be reimbursed by his neighbor. When he looked at his receipt, he saw that it had ripped!



a. If his garden has a diameter of 28.8 ft., how much did it cost to buy enough fence for his garden? Show all work below and explain how you found your answer.