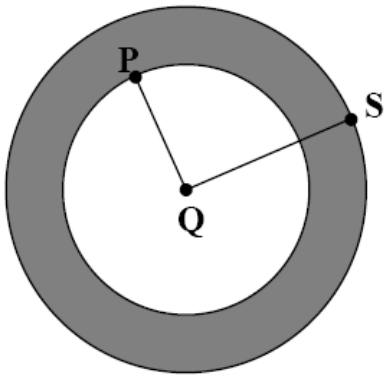
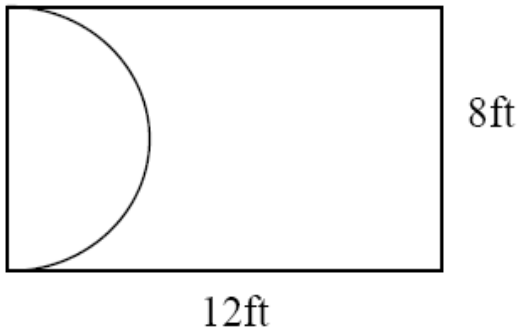
Name: _____

Circumference and Area of a Circle

1) Find the area of the shaded region below in terms of π if QP = 8 ft and QS =12 ft.



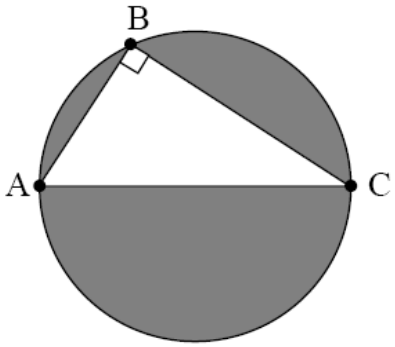
2) Mrs. White has a rectangular foyer in her home. She wants to lay hardwood flooring down on all of the area except for the semi circular area in front of the entrance door.



1) Calculate to the nearest square foot how much hardwood flooring Mrs. White will need. Use the accompanying diagram below.

2) Use your answer from part (a) to calculate the cost of the hardwood flooring if it is priced at $2.25 per square foot.

3) In the following diagram, right triangle *ABC* is inscribed in a circle. It is given that *AC* = 26 , *BC* = 24 and *AC* is the diameter of the circle. Determine the area of the shaded region to the nearest *hundredth*.



4) Two circles having a diameter of 4 inches are within rectangle KLMN. It is given that LM = 7 inches and NM = 12 inches. Find the area of the shaded region to the nearest tenth of a square inch.