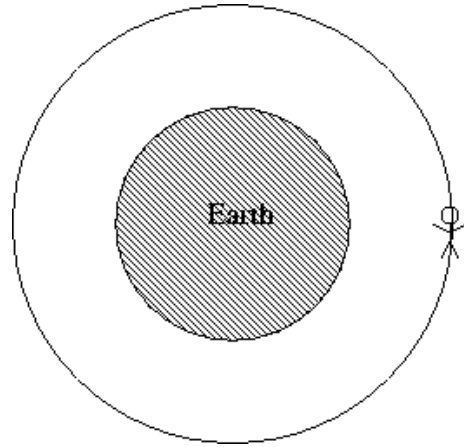


Name: _____

Quiz 5

1. Uncle Norm is in his space suit in a circular orbit around the earth. He makes one revolution every hour, and his orbit is always 100 miles from the surface of the earth. Using the fact that the earth has a radius of 3,960 miles, calculate Uncle Norm's linear speed in miles per hour.



2. While Uncle Norm is up in space, Aunt Norma goes to the fridge to steal a piece of the cheesecake Uncle Norm made. The cheesecake is in the shape of a cylinder. It is one inch thick and six inches in diameter. She cuts a wedge-shaped piece of the cake with central angle 30° . What is the volume of cheesecake that Aunt Norma takes?

(One more problem on the back.)

3. Graph the function

$$f(x) = \frac{3(x^2 - 4x + 4)}{x^2 - 5x}.$$

