



Geometry Homework

Circumference Speed

Name _____

Hwrk Geometry Circumference speed.doc (5-6-15)

Calculate the following to three significant digits. Ie x.xxx

- On a clock with a second hand that measures 6.15 inch radius, from the center of rotation to the tip.
 - How far does the tip travel in one revolution? _____
 - How many revolutions per minute does it make? _____
 - How many inches per minute is the tip making? _____
- Assuming that the earth is 12,756 km in diameter.
 - How many km does a stationary object travel in one revolution? _____
 - How many km does it travel in one hour? _____
 - How many km does it travel in one minute? _____
- On a clock with a second hand that swings a 41.66 inch radius, from the center of rotation to the tip.
 - How far does the tip travel in one revolution? _____
 - How many revolutions per minute does it make? _____
 - How many inches per minute is the tip making? _____
- Assuming that Jupiter is 142,984 km in diameter and its day lasts 9.9 hours.
 - How many km does a stationary object travel in one revolution? _____
 - How many km does it travel in one hour? _____
 - How many km does it travel in one minute? _____
- Assuming that Neptune is 49,528 km in diameter and its day lasts 16.1 hours.
 - How many km does a stationary object travel in one revolution? _____
 - How many km does it travel in one hour? _____
 - How many km does it travel in one minute? _____

6. Assuming that the earth is 12,756 km in diameter. A pipeline wrapped around the center ended up 5 meters to long.

a. How thick of spacer would be needed to compensate for the mistake? _____

7. Assuming that the ----- is ---- km in diameter. A --- around the center ended --- to long.

a. How thick of spacer would be needed to compensate for the mistake? _____