*AS YOU COMPLETE THIS REVIEW, BE SURE TO SHOW WORK FOR EACH QUESTION!*

***Learning Target 1.1: I can use the ratio of a circle’s circumference to its diameter to calculate pi. (7.3.1.1)***

1. Complete the chart. Round to the nearest tenth.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Diameter** | **Circumference** | $$\frac{C}{D}$$ | **C ÷ D** | **Radius** |
|  |  |  | 3.14 | 8 cm |
|  | 47.1 cm |  |  |  |
| 9 cm |  |  |  |  |

1. The circumference of a circle is about how many times greater than its diameter?

A.) 2 B.) 3 C.) 9 D.) 4

1. The students in Mrs. Fernando’s math class wrote the following statements to help explain π.

**I.** π is the ratio of the circumference to the diameter of a circle.
**II.** π = 3.14
**III.** $π ≈ \frac{22}{7}$
**IV.** π is an irrational number

**Circle any statements that are correct.**

***Learning Target 1.2: I can calculate the circumference of a circle. (7.3.1.1)***

1. If you walk around a circle that has a diameter of 200 meters, how far have you walked?
2. What is the circumference of the circle below? (Use $π≈ \frac{22}{7}$)

A.) 22 in B.) 44 in C.) 88 in D.) 154 in

**3.** This wheel has a radius of 1.2 feet. What is its circumference?

If there are 5,280 feet in 1 miles, how many times will the wheel have to turn around in order to travel 5 miles?

***Learning Target 1.3: I can calculate the area of a circle. (7.3.1.1)***

1. What is the area of the following circle? (Leave your answer in terms of π.)

3 in

 A.) 6π in2 B.) 9π in2 C.) 36π in2 D.) 81π in2

1. The diagram shows a semicircular carpet with a diameter of 7 feet. What is the area of the carpet? (Use $π≈ \frac{22}{7}$)



***Learning Target 1.4: I can calculate the volume of a cylinder and justify its formula.(7.3.1.2)***

1. What is the volume of the cylinder? (Use π ≈ 3.14.)

3 mm

4 mm

 A.) 12 mm3 B.) 37.68 mm3 C.) 75.36 mm3 D.) 113.04 mm3

1. What is the volume of the cylinder? (Use π ≈ 3.14.)

2 in

10 in

***Learning Target 1.5: I can calculate the surface area of a cylinder and justify its formula. (7.3.1.2)***

1. Find the surface area of the cylinders below. Round your answer to the nearest whole number.
(Use π ≈ 3.14.)

 

 

1. The picture below shows pistons from a car engine. Each piston is a cylinder that has a radius of 3 centimeters and a height of 8 centimeters. What is the total surface area of each piston?