**CIRCLES – Find the Missing Measurement**

Use and rearrange the following equations to find the missing measurements of the circles. Be sure to show all of your steps for each problem. Find your answer are on the bottom of the page and cross it out.

r = d/2 d = 2r C = πd C = 2πr A = πr2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Radius** | **Diameter** | **Circumference** | **Area** |
| 1 | 12 |  |  |  |
| 2 |  | 18 |  |  |
| 3 |  |  | 47.1 |  |
| 4 |  |  |  | 200.96 |
| 5 |  |  | 65.94 |  |
| 6 |  |  |  | 3215.36 |

**Answers**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 9 | 176.63 | 75.36 | 8 | 56.52 | 254.34 |
| 346.19 | 452.16 | 64 | 16 | 21 | 24 |
| 32 | 50.24 | 15 | 7.5 | 200.96 | 10.5 |

**Circles - Word Problems**

1. The earth has a diameter of 7926.41 miles. What is the circumference of the earth? This would be the distance you would have to walk if you could walk around the equator.
2. A circular table has a radius of 2 m. A tablecloth has a radius of 3 m. How much bigger is the area of the tablecloth than the table?
3. You and your best friend are going to order pizza for dinner. You want the best “bang for your buck”, so you compare the price of ordering 2 smalls vs 1 large pizza.

At Milano’s Pizzeria, a small pizza costs $12.10 and has a radius of 8 inches. A large pizza costs $21.85 and has a radius of 12 inches. Which would be the better purchase: 2 smalls or 1 large? *Hint: find the total area of both options and compare the prices*.

1. A hotel has purchased a large, circular painting for their entrance. The circumference of a circular painting is 100.48 ft. What is the area this painting will cover?