**Pre-Calculus Mathematics 12**

Level

Mark

Total

**Chapter 4 Test**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_**

 **Mr. Formaran**

**True or False**

\_\_\_\_\_\_\_\_ 1. 2.

\_\_\_\_\_\_\_\_2. 

\_\_\_\_\_\_\_\_3. 

\_\_\_\_\_\_\_\_4. Coterminal angles – angles in standard position with the same

terminal arm.

\_\_\_\_\_\_\_5. General form of coterminal angles =

\_\_\_\_\_\_\_6. Arc Length of a Circle: arc =

\_\_\_\_\_\_\_7. In a unit circle, the hypotenuse is always equal to the radius.

\_\_\_\_\_\_\_8. Since x=cos and y=sin, we get: x2  + y2  = 12

(cos(θ))2  + (sin(θ))2  = 1

\_\_\_\_\_\_\_9. The x-value in quadrant III is positive

\_\_\_\_\_\_\_10. The y-value in quadrant IV is positive

\_\_\_\_\_\_\_11. The list below are multiples of 450

 00, 450, 900, 1200, 1800, 2250, 2700, 3150, 3600.

\_\_\_\_\_\_\_12. is a multiple of and

\_\_\_\_\_\_\_13. The given angle is in quadrant II

\_\_\_\_\_\_\_14. - 4200 is in quadrant I

\_\_\_\_\_\_\_15. The coordinates in 450 are not identical.

**Answer the following (Show your solution)**

1. Complete the table.

|  |  |
| --- | --- |
| Degree Measure | Radian Measure |
| 1160 |  |
|  |  |

2. Express the angles coterminal in general form. Identify the angles coterminal

with in the domain -4π≤ θ ≤ 4π.

3. Find the arc length subtended by an angle of radians,

if the radius is equal to 20 cm.

4. Determine the exact values of the six trigonometric ratios for 315

5. Determine the approximate values of the six trigonometric ratios for 127to the

nearest thousandth. (Calculator)

6. P(-2,9) is a terminal point of angle in standard position. Determine the exact values of

the six trigonometric ratios for

7. Suppose csc = 7. Determine the exact values of the other trigonometric ratios for

0

8. Solve each trigonometric equation in the specified domain.

7 sin + 2 = 1 + 5 sin , 0

9. Solve for . ta, 0 (calculator). Round to the nearest hundredth.

10. Solve , 0