Pre-Calculus 4.1 – 4.3 REVIEW **NO CALCULATOR** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hour:\_\_\_\_\_\_\_

**Answer each question carefully. You MUST show work for full credit.**

* 1. Given the point on the unit circle below, find all six trigonometric functions.

Sin$θ$ = \_\_\_\_\_\_\_

Cos$θ$= \_\_\_\_\_\_\_

Tan$θ$= \_\_\_\_\_\_\_

Csc$θ$ = \_\_\_\_\_\_\_

Sec$θ$= \_\_\_\_\_\_\_

Cot$θ$= \_\_\_\_\_\_\_



* 1. Given that , , Find the exact value of each of the remaining trig functions.

Sin$θ$ = \_\_\_\_\_\_\_

Cos$θ$= \_\_\_\_\_\_\_

Tan$θ$= \_\_\_\_\_\_\_

Csc$θ$ = \_\_\_\_\_\_\_

Sec$θ$= \_\_\_\_\_\_\_

Cot$θ$= \_\_\_\_\_\_\_

|  |
| --- |
| **#8-12: Find the exact value of each expression below.**  |
| 8.   | 9.  |
| 10.  | 11.  |
| 12.  |
| **#13-14:** Find the co-function with the same value as the given expression |
| 13.   | 14.  |

Pre-Calculus 4.1 – 4.3 REVIEW **CALCULATOR** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hour:\_\_\_\_\_\_\_

**Answer each question carefully.**

**You MUST show work (neatly) for full credit.**

**Please circle your final answer(s).**

|  |  |
| --- | --- |
| 15. Convert 125o to radians.  | 16. Convert  to degrees. |
| #17-18 : Find one positive and one negative coterminal angle. Your answer must be in the same form as the question. |
|  17.   | 18.  |
| 19. At a certain time of day, the angle of elevation of the sun is 35 degrees. To the nearest foot, find the height of a tree whose shadow is 40 feet long. |
| 20. A telephone pole is 50 feet tall. A guy wire 75 feet long is attached from the ground to the top of the pole. Find the angle between the wire and the pole to the nearest degree. |