Math 20-1 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Assignment 1: Angles in Standard Position

1. Sketch the following angles in standard position and state the reference angle

[8]

* 1. 190⁰ b. 115⁰ c. 317⁰ d. 12⁰





Ref angle = \_\_\_\_\_\_ Ref angle = \_\_\_\_\_\_ Ref angle = \_\_\_\_\_\_ Ref angle = \_\_\_\_\_\_

1. Given the following reference angles and quadrant, state the angle in standard position.

[4]

|  |  |  |
| --- | --- | --- |
| **Reference Angle** | **Quadrant** | **Angle in standard position** |
| 23⁰ | 1 |  |
| 45⁰ | 2 |  |
| 85⁰ | 3 |  |
| 7⁰ | 4 |  |

1. Angle Ɵ is in standard position. Determine all the possible quadrants in which the terminal arm could lie.
2. Sin Ɵ = -3/5 b) tan Ɵ = -5

[2]

1. a) Sketch an angle of 344o in standard position.

[1]

1. Determine the reference angle for this angle.

[1]

1. Determine the other angles between 00and 360o that have the same reference angle.

[2]

1. The point Q (-3, 6) is on the terminal arm of an angle .
   1. Draw the angle in standard position.

[1]

* 1. Determine the exact distance from the origin to point Q.

[2]

* 1. Determine the exact values of ,  and .

[3]

* 1. Determine the reference angle.

[1]

* 1. Determine the angle in standard position.

[1]

1. Given the point (-5, 12), determine the 3 primary trig ratios.

[3]

1. Given the following trig ratios, determine all possible angles between ⁰.
   1. 

[6]

b. 

c. 