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

Right Triangle/Unit Circle Trigonometry Review

1. Given θ = 240°
	1. Sketch the angle in standard position.
	2. Convert θ from degrees to radians.
	3. Find a positive and a negative coterminal angle. Express each answer in degrees and radians.

Positive coterminal angle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Degrees Radians

Negative coterminal angle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Degrees Radians

* 1. Find all six trigonometric functions of θ.

sin θ = csc θ =

cos θ = sec θ =

tan θ = cot θ =

2. Find the value of the indicated trigonometric functions for:

a. $θ= \frac{17π}{6}$

sin θ = cos θ = tan θ =

b. $θ= \frac{-13π}{3}$

sin θ = cos θ = tan θ =

3. Find the value of the indicated trigonometric functions for:

a. $θ= \frac{15π}{4}$

sin θ = cos θ = tan θ =

csc θ = sec θ = cot θ =

b. $θ= -\frac{17π}{3}$

sin θ = cos θ = tan θ =

csc θ = sec θ = cot θ =

4. Using special right triangles find value of the following trigonometric function. Each triangle has a hypotenuse of 1.

 In this scenario***x =*** $\frac{7π}{6}$***.***

|  |  |  |  |
| --- | --- | --- | --- |
| **Function/Angle** | $$π-x$$ | $$π+x$$ | $$2π-x$$ |
| **Sine** |  |  |  |
| **Cosine** |  |  |  |
| **Tangent** |  |  |  |
| **Cosecant** |  |  |  |
| **Secant** |  |  |  |
| **Cotangent** |  |  |  |