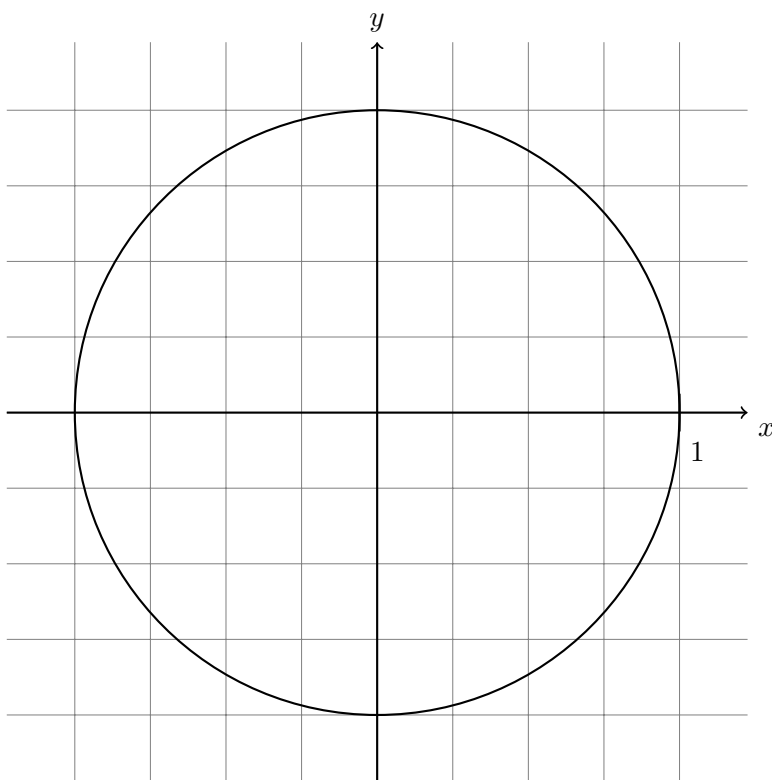


MAT 1275
Spring 2018
Professor K. Poirier
Spring break—quiz
April 10

Name (Print) : _____

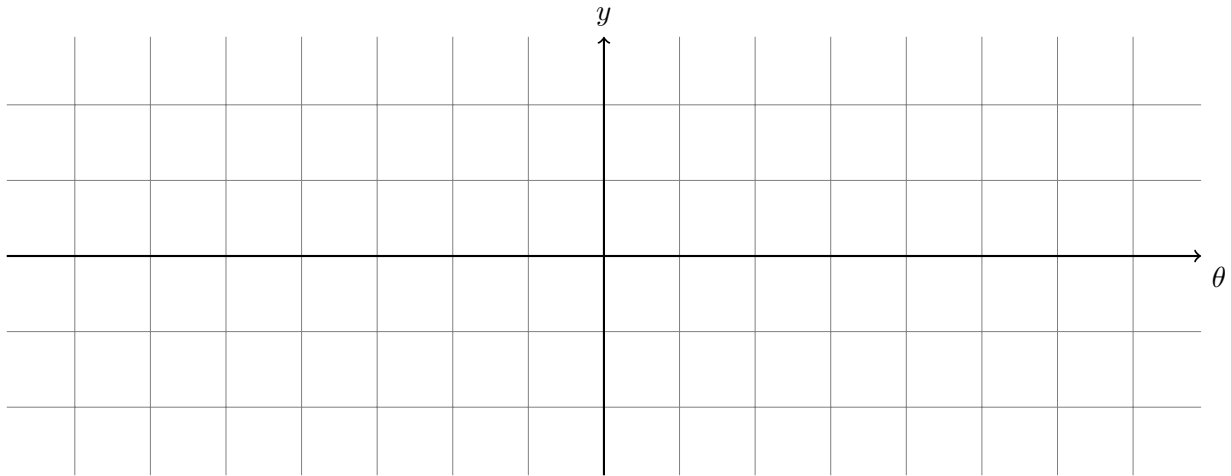
This quiz contains 5. It does not matter whether your answers for this quiz are correct ; any student who makes a clear attempt to answer each question will receive 2 participation points.

1. Use the definitions that you learned in the activity to complete and label the following diagram of the unit circle. Include the following labels
 - (a) θ (you will have to make a choice here ; any choice that matches the activity is okay)
 - (b) $\sin(\theta)$
 - (c) $\cos(\theta)$

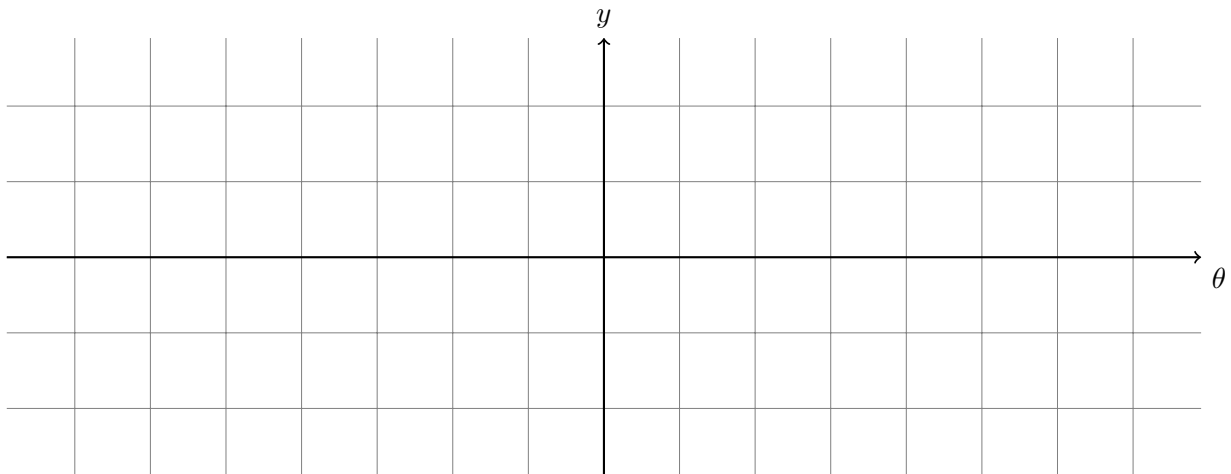


2. In words, describe how the functions $\sin(\theta)$ and $\cos(\theta)$ are defined. You may refer to your above diagram if you wish.

3. Graph $\sin(\theta)$. Include a scale on your axes.



4. Graph $\cos(\theta)$. Include a scale on your axes.



5. (a) The following expression can be simplified. Use the definitions of \sin and $\cos(\theta)$ to simplify the expression. [Hint : This question follows from the activity, but can't be found explicitly in the activity.]

$$\sin^2(\theta) + \cos^2(\theta) =$$

- (b) Explain how you found your answer in words. Use complete sentences.