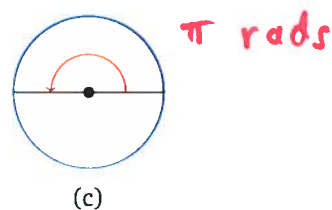
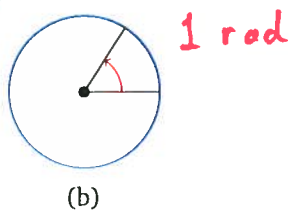
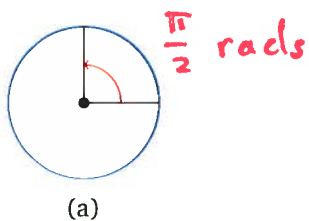


Quiz 2, Math 1060-003
September 6, 2013

The quiz will last fifteen (15) minutes. Each question is worth one point – therefore there is no partial credit. Please write your answer to Question #1 on the first line, Question #2 on the second line, and so on.

Name: Answer Key uNID: _____



1. (1 point) Consider the three angles depicted above. Which figure depicts an angle equal to one radian?

1. b

2. (1 point) Consider an angle $\theta = \frac{\pi}{4}$ rads. What is a negative angle that is coterminal to θ ?

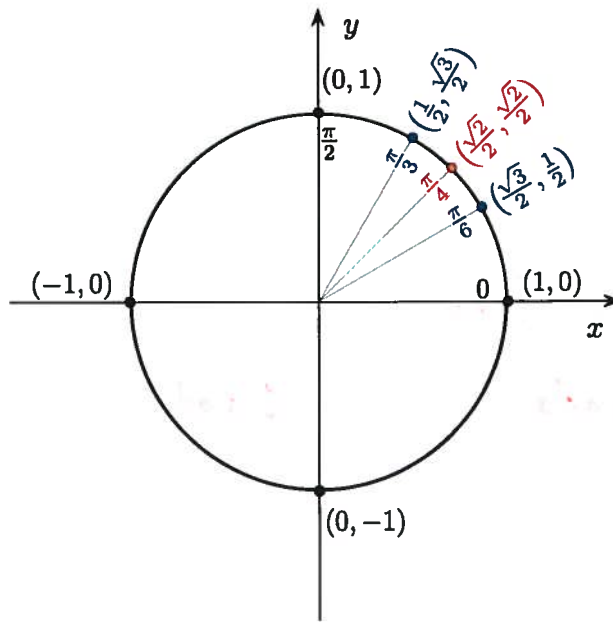
Angles that are coterminal to θ (measured in rads) are of the form $\theta + 2n\pi$ rads

$$\theta = \frac{\pi}{4}, n = -1$$

2. $-\frac{7\pi}{4}$ rads

$$\rightarrow \frac{\pi}{4} - 2\pi = -\frac{7\pi}{4} \text{ rads}$$

Turn the page over



For the following three questions, use the unit circle printed on this page, the definitions of the trigonometric functions, and the identities we discussed in class. **For credit, your answer must be written as either an integer or a fraction (no decimal place) and in terms of square roots (when necessary).**

3. (1 point) $\tan\left(\frac{\pi}{4}\right)$.

$$\tan \theta = \frac{y}{x} = \frac{\sqrt{2}/2}{\sqrt{2}/2} = 1$$

3. 1

4. (1 point) $\sin\left(-\frac{\pi}{3}\right)$.

$$\sin(-\theta) = -\sin \theta = -y$$

$$\rightarrow \sin\left(-\frac{\pi}{3}\right) = -\sin \frac{\pi}{3} = -\frac{\sqrt{3}}{2}$$

4. $-\frac{\sqrt{3}}{2}$

5. (1 point) $\cos\left(\frac{13\pi}{6}\right)$.

$$\cos(\theta + 2\pi) = \cos \theta = x$$

$$\frac{13\pi}{6} = \frac{\pi}{6} + 2\pi$$

$$\rightarrow \cos \frac{13\pi}{6} = \cos \frac{\pi}{6} = \frac{\sqrt{3}}{2}$$

5. $\frac{\sqrt{3}}{2}$