

**Test #2 (Part 1, No Calculator)**

Math 150, Prof. Beydler

Name: Solutions

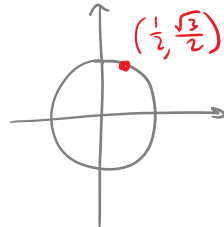
Thursday, April 20, 2017

**Directions:** Show all work. No books, notes, or calculators. Your desk and lap must be clear (no phones, no smart watches, etc.). Write your answers in the indicated places, or box your answers. When you're finished with Part 1, please turn it in and start Part 2. Good luck!

1. (1 points each) Evaluate the following. (Write your answers as exact values.)

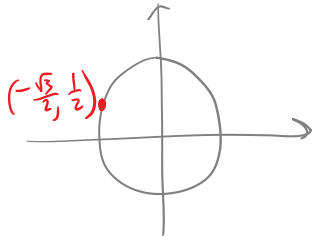
a.  $\sin\left(\frac{7\pi}{3}\right)$

$$\frac{7\pi}{3} - 2\pi = \frac{\pi}{3}$$



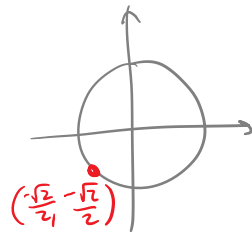
Answer:  $\frac{\sqrt{3}}{2}$

b.  $\cos\left(\frac{5\pi}{6}\right)$



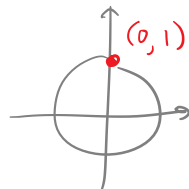
Answer:  $-\frac{\sqrt{3}}{2}$

c.  $\tan\left(-\frac{3\pi}{4}\right) = \frac{(-\frac{\sqrt{2}}{2})}{(-\frac{\sqrt{2}}{2})} = 1$



Answer: 1

d.  $\sec\left(\frac{\pi}{2}\right) = \frac{1}{0}$



Answer: undefined

e.  $\cot\left(\frac{\pi}{2}\right) = \frac{0}{1}$

Answer: 0

Reminder: When you're finished with this part, please turn it in and start Part 2.