Name:	Caleb McWhorter — Solutions	
MAT 296		

**Problem 1:** Mark the following statements as T for True or F for False.

- (i)  $\underline{F}$ : If you miss an exam with a valid excuse, such as a medical emergency, you can arrange with your instructor to make-up the exam.
- (ii) <u>T</u>: Syracuse University offers free counseling services to its students and staff.
- (iii) <u>T</u>: You may attend office hours or go to the Math Clinic in Carnegie 109 for help with course problems.
- (iv) *T* : Missing too many classes can result in an *F* for the course.
- (v) <u>T</u>: It is the students responsibility to know and abide by the Academic Integrity code, register religious observances in MySlice within the first two weeks, coordinate with Office Student Disability Services (if applicable), and email the instructor if you are going to be absent for class or address other issues.

Problem 2: Complete the following chart:

θ	0	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$
$\sin \theta$	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1
$\cos \theta$	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0
$\tan \theta$	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	undef.

Problem 3: Evaluate the following trigonometric functions:

(a) 
$$\sin \frac{3\pi}{4} = \frac{1}{\sqrt{2}}$$
  
(d)  $\cot \frac{\pi}{3} = \frac{1}{\sqrt{3}}$ 

(b) 
$$\cos \frac{7\pi}{6} = -\frac{\sqrt{3}}{2}$$
 (e)  $\sec \frac{\pi}{6} = \frac{2}{\sqrt{3}}$ 

(c) 
$$\tan \frac{7\pi}{4} = -1$$
 (f)  $\csc \frac{\pi}{4} = \sqrt{2}$