CCP **Fall 2011**
Math 162 **Dr. Yun Yoo**

Attendance Quiz 15

Review for exam 2

Name: _____ Date : _____

Closed books without notes and No calculator during exam. You have to study AQ#8-15 and HW sets for test 2.

1. Find the exact value of the trigonometric function.

(a) $\cos\frac{2\pi}{3}$ (b) $\cos\frac{3\pi}{2}$

(c) $\sin(-\frac{7\pi}{3})$ (d) $\sin\frac{11\pi}{6}$

(e) $\csc\frac{\pi}{6}$ (f) $\sec\frac{\pi}{3}$

(g) $\cot\frac{\pi}{4}$ (h) $\cos(-\frac{5\pi}{6})$

(i) $\cot(-\frac{3\pi}{4})$ (j) $\sin^2\frac{\pi}{6}+\cos^2\frac{\pi}{6}$

2. Sketch a triangle that has acute angle θ, and find the other five trigonometric ratios of θ.

$$\cos\theta=\frac{3}{5}$$

3. Find the values of the trigonometric functions of θ from the information given.

$$\cos\theta=-\frac{3}{4} \quad \text{and} \quad \tan\theta>0$$

4. Let $f(x)=2\cos x$, $g(x)=\cos(2x)$, and $h(x)=3\cos(\pi\cdot x)$.
   (a) Find amplitude of each given function.
   (b) Find the range of $h(x)=3\cos(\pi\cdot x)$.
   (c) Find period of each given function.
   (d) Sketch three graphs on the same axes (at least two periods) and label them clearly. Unclear graphs won't get credits at all.

5. Let $f(x) = 3\tan(2\pi \cdot x)$ and $g(x) = \tan(\pi \cdot x)$.
   (a) Find period of each given function
   (b) Find the domain of $y = 2\tan x$.
   (c) Sketch two graphs on the same axes (at least two periods) and label them clearly. Unclear graphs won't get credits at all.

6. Let $f(x) = 4\sin 2(x - \frac{\pi}{2}) + 3$.
   (a) Find amplitude of $f(x)$.
   (b) Find the domain of $f(x)$.
   (c) Find the range of $f(x)$.
   (d) Sketch graph of $f(x)$ (at least two periods) and label them clearly. Unclear graph won't get credits at all.

7. (a) Let $f(x) = \sec(x)$. Sketch graph of $f(x)$ (at least two periods) and label them clearly.
(b) Let $f(x) = \csc(x)$. Sketch graph of $f(x)$ (at least two periods) and label them clearly.
(c) Let $f(x) = \cot(x)$. Sketch graph of $f(x)$ (at least two periods) and label them clearly.

8. The point P is on the unit circle. Find $P(x, y)$ from the given information.

The y-coordinate of P is $-\frac{1}{3}$ and the x-coordinate is negative.