QUIZ 6 - MTH 166 - 10 points

Name:_____Date:__

Instructions: Solve the following. Remember to show all work in order to receive full credit.

1. a) Express $\frac{\pi}{9}$ in degree measure.
   b) Express 150^0 in radian measure.

2. Find the length of the arc on a circle of radius 10 inches intercepted by a central angle of 60^0.
3. Sketch a right triangle corresponding to trigonometric function $\cos\theta = 5/7$. Using the Pythagorean Theorem find the third side and then find the other 5 trigonometric functions.
4. A 10 meter pole casts a 6 meter shadow. Find the angle of elevation of the sun.
5. If $\cos\theta = \frac{-\sqrt{2}}{2}$, find θ. $(0 \leq \theta \leq 2\pi)$.
6. Graph one period of $f(x) = \cos 4x$.
7. Use a calculator to approximate the value (if possible) of
   a) $\arccos 1.5$
   b) $\sin^{-1}\frac{\sqrt{3}}{2}$
   c) $\arcsin(-.125)$
   d) $\arctan(-3)$
   e) $\csc 105^0$
   f) $\sec\frac{\pi}{4}$

- REMEMBER after QUIZ # 6 there will be an exam in the TESTING CENTER
- - EXAM # 3 will include concepts from Quizzes # 5 and # 6