VALENCIA COMMUNITY COLLEGE

College Trigonometry **Name:**

Review for Test 4 **Date:**

1) Find the exact real number values without using your calculator.

a) $\cos^{-1}(-\frac{1}{2})$ b $\tan^{-1}(-1)$

c) $\cos(\cos^{-1}\frac{1}{6})$ d) $\tan[\sin^{-1}(\frac{\sqrt{3}}{2})+\sin^{-1}(\frac{1}{2})]$

e) $\cos[2\tan^{-1}\left(\frac{2}{5}\right)]$

2) Find the exact solutions over the indicated intervals
Some problems from Section 5.3

3) Solve triangles using either sine or cosine rules.

Review for Final

1) Solve the right triangle (labeled as in the figure), given that a = 12.4 ft, c = 16.8 ft.
b = x = y =

2) Convert: $\deg.\min.\sec \Rightarrow rad \Rightarrow dec.\deg$

3) Suppose that sec x = $-\frac{5}{4}$, x is a quadrant 3 angle, find the exact values of the other remaining 5 trigonometric ratios.
Sin x = cos x = tan x = sec x = cot x =

4) State the amplitude , period, and phase shift for trig functions.

6) Draw the graph of y = cos 2x + 4 sin x in the interval $-2\pi \le x \le 2\pi$. Using your graph, find the values of y when the value of x is given.

7) Verifying identities

8) Finding exact real number values for trig. ratios: Ex: tan 75°.

9) Finding exact solutions to trigonometric equations over the indicated intervals

10) Solving triangles using sine or cosine laws