

**NAME:**

**Quiz 8 [25 pts]. July 10, 2007.**

**Math 0115 Sec 0101 Summer 2007**

[8] **1.** If  $\cos(x) = \frac{1}{4}$  and  $x$  is in Quadrant IV, find  $\cos(2x)$ .

[8] **2.** Find all solutions of the equation:  $2 \sin x \cos x + \sin x = 2 \cos x + 1$ .

[9] **3.** You are on the ground at the base of a building where someone has strung a clothesline from the top, 20 feet across an alley, to another building the same height. Your angle of elevation looking across the alley to the other clothesline is 60 deg. What is the height of the building you are standing under?