

MATH 152
Mrs. Bonny Tighe

QUIZ 11A
25 points
11.3

NAME _____

Section _____ Wed 12/7/05

1. Find the Cartesian coordinates for the polar coordinate

a) $(3, 5\pi/4)$ _____

b) $(3, -5\pi/3) =$ _____

and two different Polar coordinates for the points:

a) $(2, -2)$ _____ and _____

b) $(-3, -2)$ _____ and _____

2. Find the distance between the two points with polar coordinates

$(2, 5\pi/6)$ and $(1, \pi/4)$

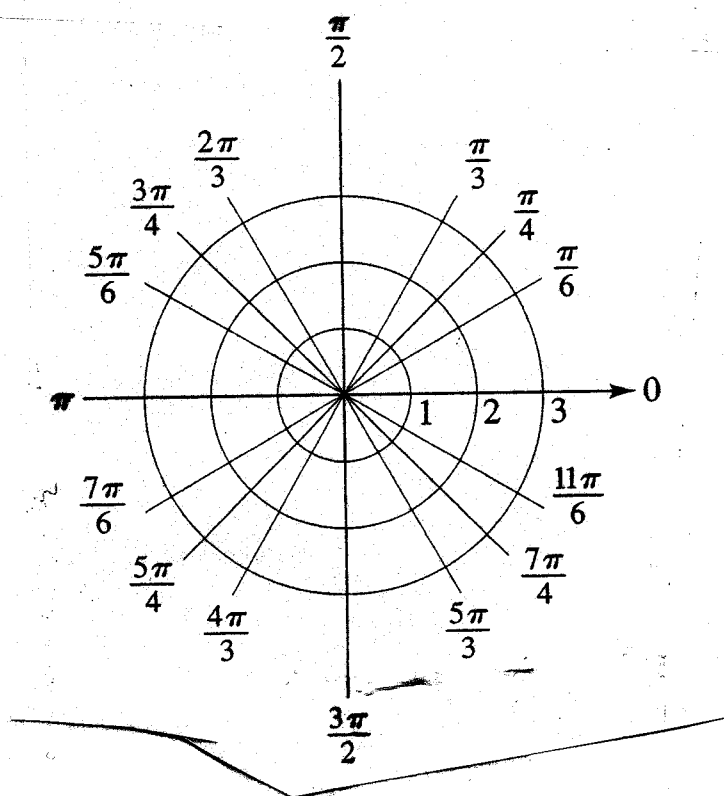
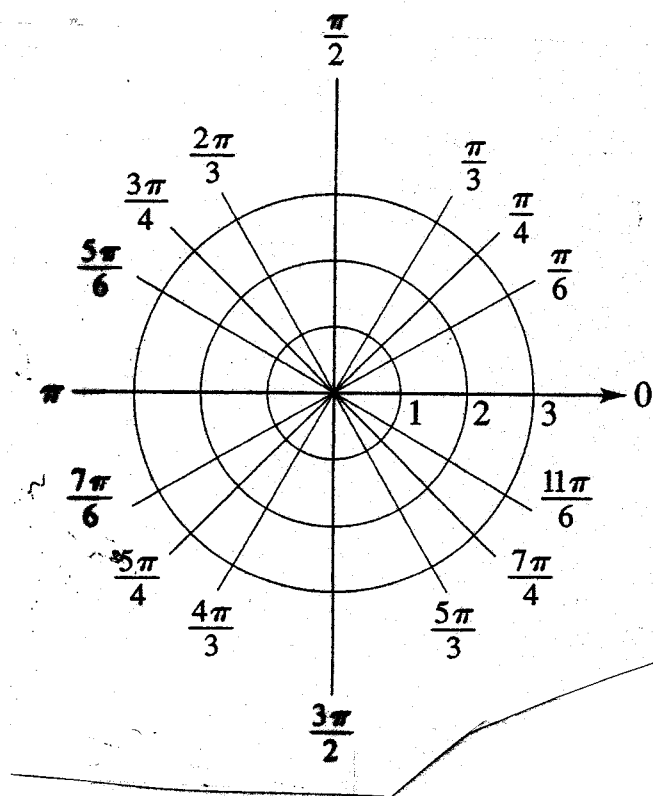
3. Find the slope of the tangent line to the curve $r = \cos 2\theta$ at $\theta = \pi/4$

4. Find a polar equation for the curve represented by the Cartesian equation $x - 2y = 3$.

5. Sketch the curve with the given polar equation.

a) $r = 1 + \sin 2\theta$

b) $r = \cos 3\theta$



6. Find the points on the curve $r = 1 + \cos \theta$ where the tangent line is horizontal or vertical.