

TEST #3 - CALCULATOR PORTION

Math 132

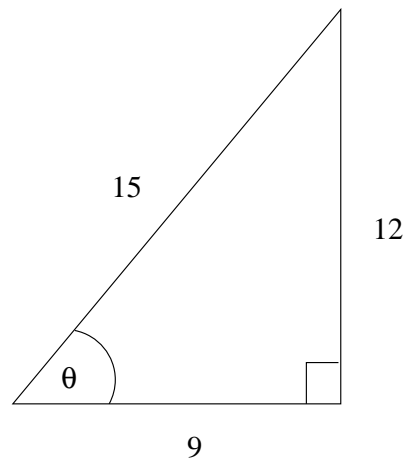
Name: _____

Problem	1	2	3	4	5	Total
Possible Score	25	25	30	40	30	150
Your Score						

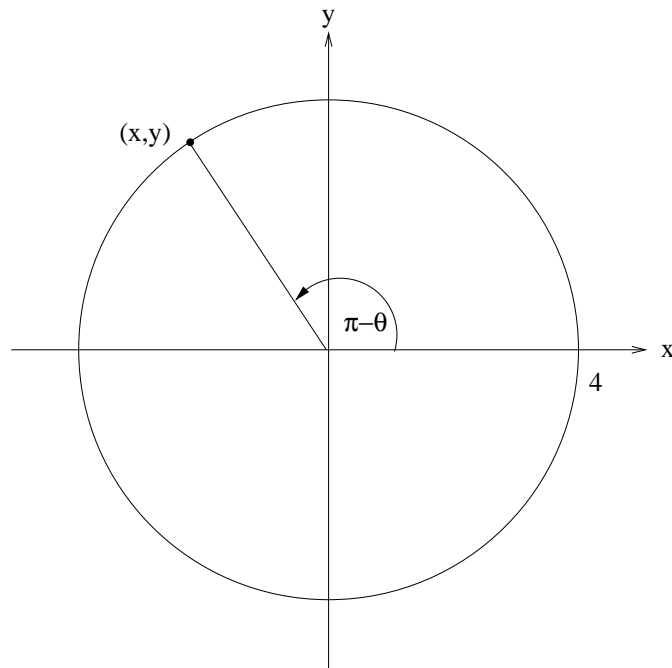
SHOW ALL WORK. Any solution that is not accompanied by the appropriate work necessary for solving the problem will receive no credit. If you need more space, you may use the back of the page.

1. (25 pts) Solve the equation $4 \cos(2x) + 1 = 4$ for $0 \leq x \leq \pi$.

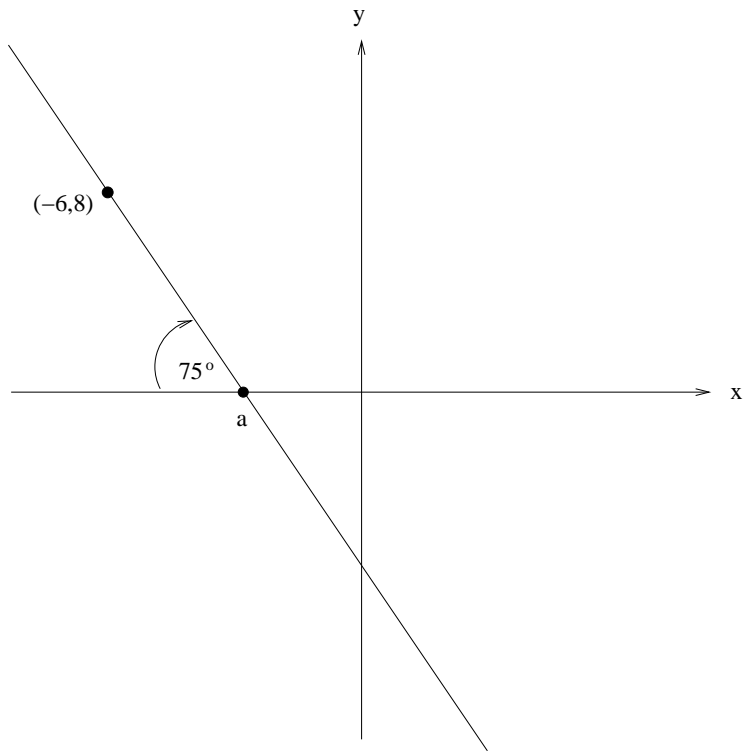
2. (25 pts) Given the following right triangle containing the angle θ :



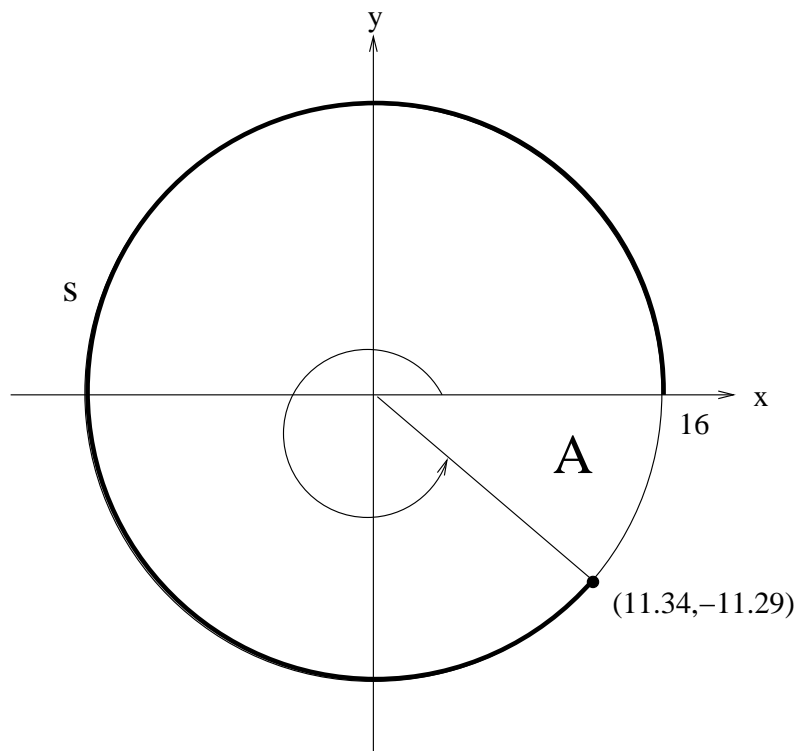
Find the coordinates of the point on the following circle of **radius 4** (**Hint:** think reference angles).



3. (30 pts) Find the value of a in the below figure (**Round the answer to two decimal places**).



4. In the figure below, the circle has radius $r = 16$.



(a) (20 pts) Find the length of the bold arc marked with an **s** in the above figure (**Round the answer to two decimal places**).

(b) (20 pts) Find the area of the sector marked with an **A** in the above figure (**Round the answer to two decimal places**).

TEST #3 - NO CALCULATOR PORTION

5. (30 pts) Sketch one period of the graph $y = -3\cos(5x + \pi) + 2$. Be sure to label the important x -values and y -values.

