

Calculus II

Name: _____

Study Guide 25

Class: _____

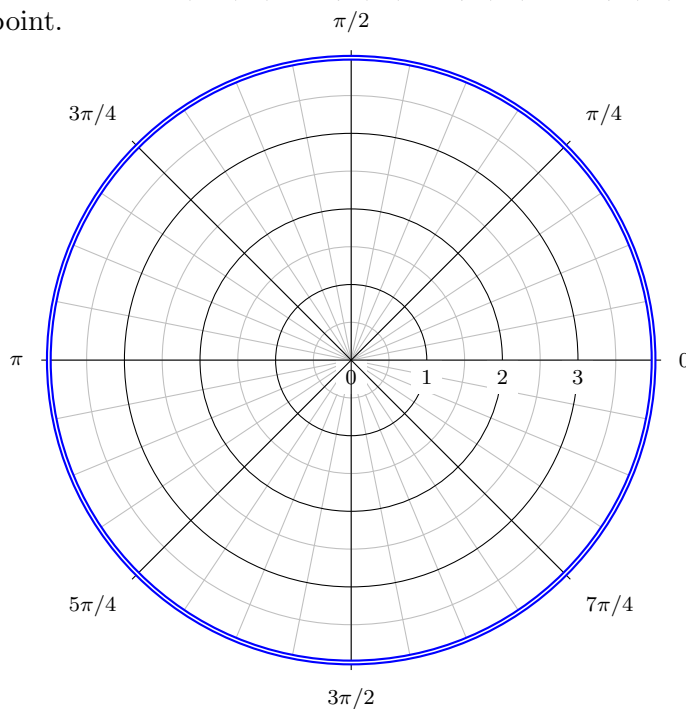
Due Date: _____

Score: _____

No Work \Leftrightarrow No Points

Use Pencil Only \Leftrightarrow Be Neat & Organized

1. (5 points) Plot the polar points $(2, 0)$, $(-2, \pi/4)$, $(3, 3\pi/4)$, $(-3, 5\pi/4)$, $(4, 7\pi/4)$, $(2, \pi)$ below. Clearly label each point.



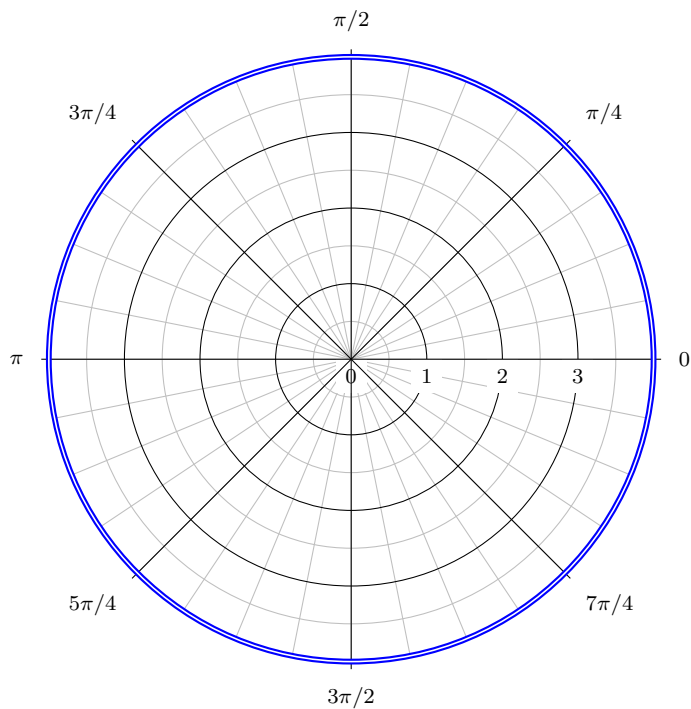
2. (3 points) Convert the polar point $(-6, \pi/3)$ to a rectangular coordinate point.

2. _____

3. (3 points) Convert the polar equation $r = 4$ to a rectangular equation.

3. _____

4. (6 points) Draw the polar equations $r = 2$, $r \cos \theta = 3$, $r = -2 \csc \theta$ below. Clearly label each graph.



5. (3 points) Convert the rectangular point $(-6, 2\sqrt{3})$ to a polar coordinate point.

5. _____

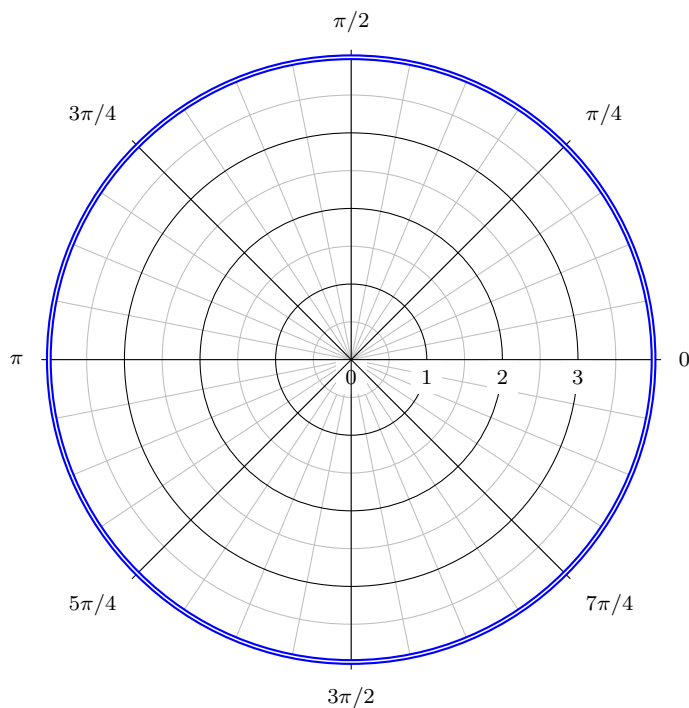
6. (3 points) Convert the rectangular equation $2x - 3y = 6$ to a polar equation.

6. _____

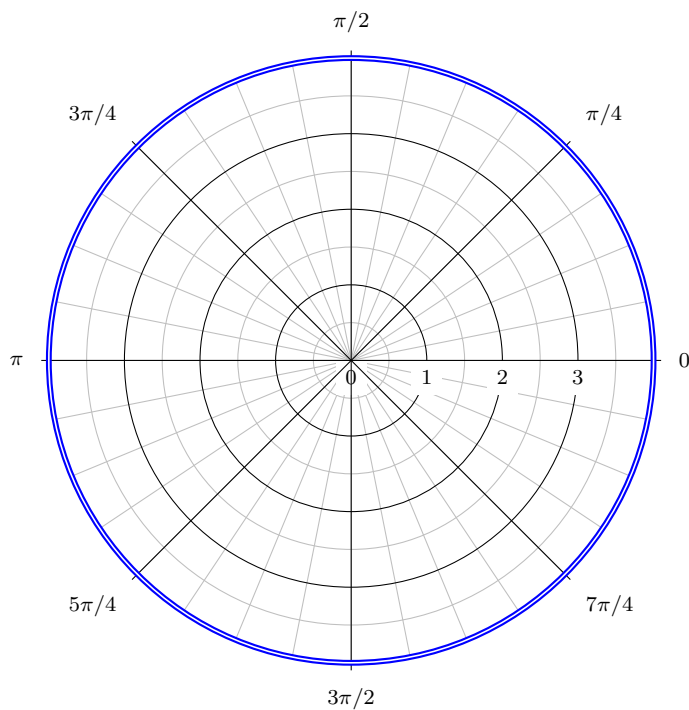
7. (3 points) Convert the polar equation $r = 6 \sin \theta$ to a rectangular equation.

7. _____

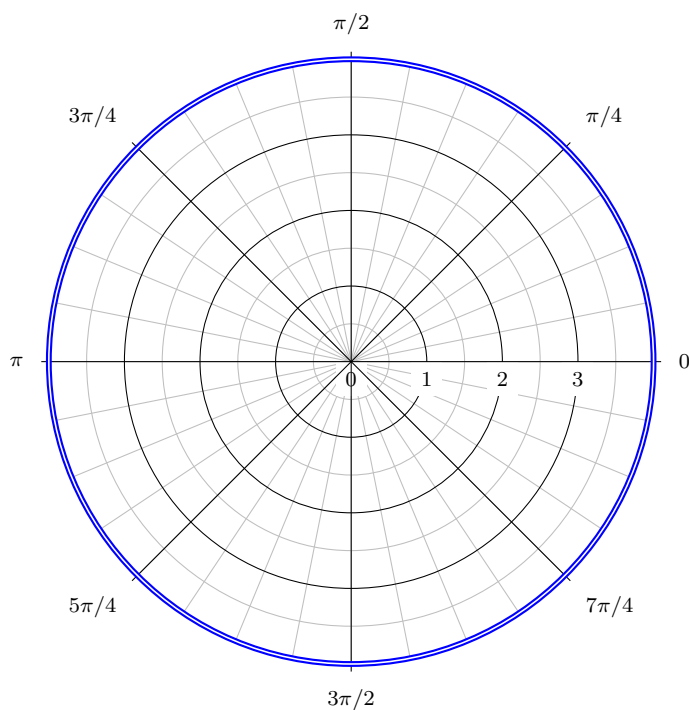
8. (6 points) Draw $r = 2 - \sin \theta$. Show your work in details and clearly label all important points.



9. (6 points) Draw $r = 1 + 2 \cos \theta$. Show your work in details and clearly label each important points.



10. (6 points) Draw $r = 3 \sin 2\theta$. Show your work in details and clearly label all important points.



11. (6 points) Draw $r = 2 \cos 3\theta$. Show your work in details and clearly label each important points.

