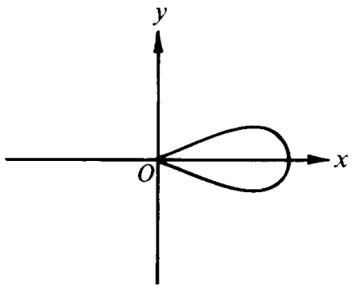
Polar graph practices
Pre Calc RH

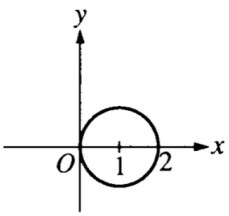


23. Which of the following gives the area of the region enclosed by the loop of the graph of the polar curve $r = 4\cos(3\theta)$ shown in the figure above?

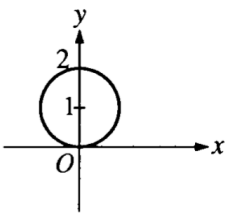
State the interval for the given graph.

5. Which of the following represents the graph of the polar curve $r = 2\sec\theta$?

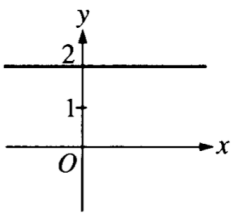
(A)



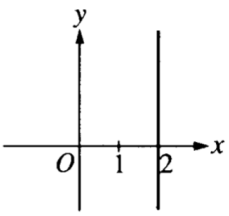
(B)



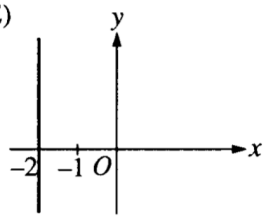
(C)

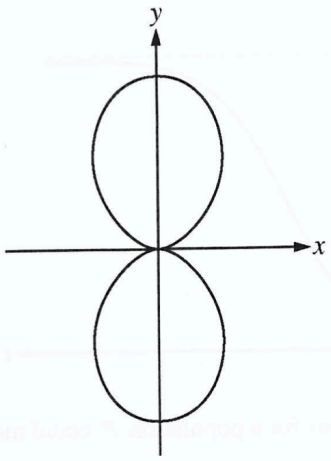


(D)



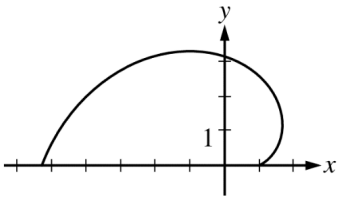
(E)





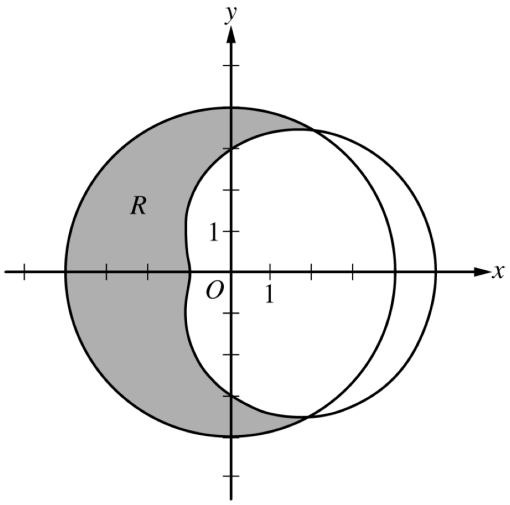
26. Which of the following expressions gives the total area enclosed by the polar curve $r = \sin^2\theta$ shown in the figure above?

State the values of θ where $r = 0$.



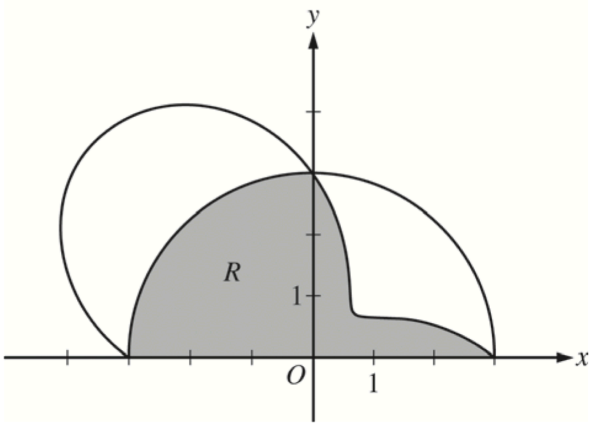
78. The graph above shows the polar curve $r = 2\theta + \cos\theta$ for $0 \le \theta \le \pi$. What is the area of the region bounded by the curve and the x-axis?

Find x and y intercepts (use of calculator allowed)



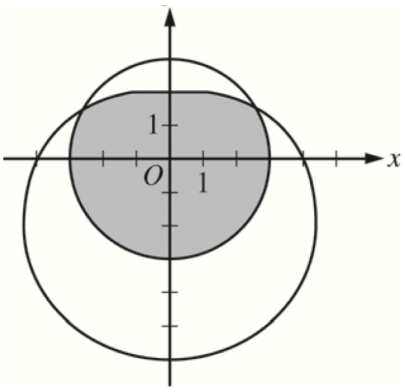
5. The graphs of the polar curves $r = 4$ and $r = 3 + 2\cos\theta$ are shown in the figure above.

State the intersections of two given graphs.



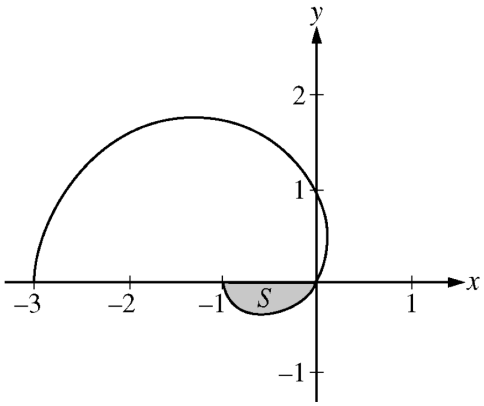
2. The graphs of the polar curves $r = 3$ and $r = 3 - 2\sin(2\theta)$ are shown in the figure above

Find the intersections of two given graphs.



2. The graphs of the polar curves $r = 3$ and $r = 4 - 2\sin\theta$ are shown in the figure above.

State the intersections between two graphs.



4. The graph of the polar curve $r = 1 - 2\cos\theta$ for is shown above. Let S be the shaded region in the third quadrant bounded by the curve and the x-axis.

State the interval for the given graph and find x and y intercepts.