

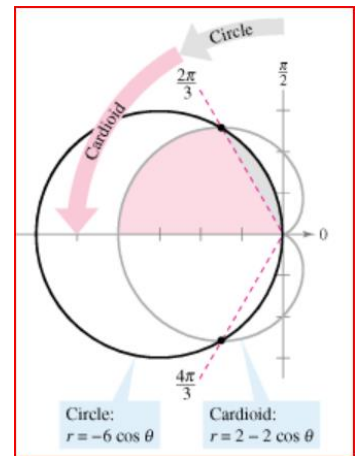
CHA	AP CALCULUS BC	
3	Topic: 9.9	Finding the Area of the Region Bounded by Two Polar Curves
Learning Objective CHA-5.D: Calculate areas of regions defined by polar curves by using definite integrals.		

Example 1: Finding the Area of a Region Between Two Curves

Find the area of the region common to the two regions bounded by the following curves

$$r = -6 \cos \theta$$

$$r = 2 - 2 \cos \theta.$$



Example 2: Finding the Area of a Region Between Two Curves

Find the area that is inside $r = 3 + 2 \sin \theta$ and outside the circle $r = 2$. The graph of these two curves is shown to the right.

