**5A Polar Coordinates and Equations**

 

Cartesian Polar



1. Find the Polar coordinates of the following point:
2. (5,9)
3. (5, -12)
4. $(-\sqrt{3},-1)$
5. Convert the following Polar coordinate into Cartesian form.
6. $\left(10, \frac{4π}{3}\right)$
7. $\left(8, \frac{2π}{3}\right)$
8. Find a Cartesian equation of the following curve:
9. $r=5$
10. $r=6cosecθ$
11. $r=2+cos2θ$
12. $r^{2}=Sin2θ$, $0<θ<\frac{π}{2}$

$$2xy$$

$$\left(x^{2}+y^{2}\right)^{2}=$$

$$\left(x^{2}+y^{2}\right)^{\frac{3}{2}}=3x^{2}+y^{2}$$



1. Find a Polar equivalent for the following Cartesian equation:
2. $y^{2}=4x$
3. $x^{2}-y^{2}=5$
4. $y\sqrt{3}=x+4$