Polar Coordinates (Section 6) **Version A**
Rensselaer Calculus Skills Practice Page

No calculators will be allowed and no partial credit will be given.

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1. Convert the polar point $(3, -3\,\pi)$ to an equivalent polar point where $r > 0$ and $0 \leq \theta < 2\pi$.
2. Convert the polar point $(-2, 3\,\pi)$ to an equivalent polar point where $r > 0$ and $0 \leq \theta < 2\pi$.
3. Find the Cartesian coordinates of the point whose polar coordinates are $(4, 2\,\pi)$.
4. Find the Cartesian coordinates of the point whose polar coordinates are $\left(2, \frac{\pi}{3}\right)$.
5. The Cartesian coordinates of the point P are $(-3, -3)$. Find the polar coordinates of P for which $r > 0$ and $0 \leq \theta < 2\pi$.

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Answer Key Rensselaer Calculus Skills Practice Page, Fall 2007

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1. $(3, \pi)$
2. $(2, 0)$
3. $(4, 0)$
4. $\left(1, \sqrt{3}\right)$
5. $\left(3\sqrt{2}, \frac{5\pi}{4}\right)$