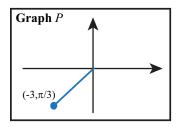
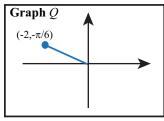
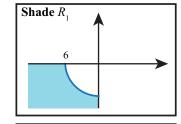
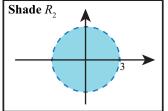
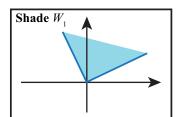
Polar Coordinates Worksheet - Answer Key

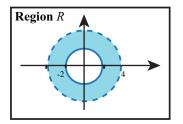












- 1. Graph the point P, $(r, \theta) = \left(-3, \frac{\pi}{3}\right)$.
- 2. Graph the point Q, $(r, \theta) = (-2, -\frac{\pi}{6})$.
- 3. Shade the region R_1 described by r > 6, $\pi \le \theta \le \frac{3\pi}{2}$.
- 4. Graph the region R_2 : r < 3.
- 5. Graph an wedge W_1 : $\frac{\pi}{5} \le \theta \le \frac{7\pi}{10}$
- 6. Write the inequalities for r and θ that describe region R.

- $2 \le r < 4, \ 0 \le \theta \le 2\pi$
- 7. Translate rectangular coordinates $(5\sqrt{3}, -5)$ into polar coordinates. $(10, \frac{11\pi}{6})$
- 8. Translate polar coordinates $(2\sqrt{2}, \frac{5\pi}{4})$ into rectangular coordinates. (-2, -2)
- 9. Translate rectanular coordinates (-4,4) into polar coordinates. $\left(4\sqrt{2},\frac{3\pi}{4}\right)$
- 10. Translate polar coordinates $(4, \frac{2\pi}{3})$ into rectangular coordinates. $(-2, 2\sqrt{3})$

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