

Polar vs. Rectangular Coordinates HW**Convert to polar form.**

1. $(-6, 8)$

2. $(3, 9)$

3. $(2, -2)$ (answer in radians)

4. $(2, -5)$

5. $(1, \sqrt{5})$

6. $(6, -5)$

7. $(3, -7)$

8. $(4, 5)$

Convert to rectangular form.

9. $(3, 55^\circ)$

10. $(-3, 180^\circ)$

11. $(2, -240^\circ)$

12. $(3, 540^\circ)$

13. $(-1, 2\pi)$

14. $(5, 90^\circ)$

15. $(2, \frac{3\pi}{2})$

16. $(-4, 45^\circ)$

Plot each point.

1. $A\left(2, \frac{\pi}{4}\right)$

2. $B\left(3, \frac{5\pi}{6}\right)$

3. $C\left(-5, \frac{\pi}{3}\right)$

4. $D\left(4, \frac{\pi}{2}\right)$

5. $E(5, 2\pi)$

6. $F\left(-4, \frac{2\pi}{3}\right)$

7. $G\left(-1, -\frac{5\pi}{6}\right)$

8. $H\left(2, -\frac{4\pi}{3}\right)$

