

HW 79

A2

1. $y = 3\sqrt{2}$

$$x = 3\sqrt{2} \cdot \sqrt{2} = 3(2) = \boxed{6}$$

2. $y = 8$
 $x = 8\sqrt{3}$

3. $b = a\sqrt{2}$

$$\left(\frac{\sqrt{2}}{\sqrt{2}}\right) \frac{b}{\sqrt{2}} = a$$

$$\frac{b\sqrt{2}}{2} = a$$

$$3\sqrt{2} = a$$

$$\boxed{\begin{array}{l} x = 3\sqrt{2} \\ y = 3\sqrt{2} \end{array}}$$

4. $\frac{5\pi}{4} \left(\frac{180^\circ}{\pi}\right) = \frac{900^\circ}{4} = \boxed{225^\circ}$

5. $175^\circ \left(\frac{\pi}{180^\circ}\right) = \frac{175\pi}{180} = \boxed{\frac{35\pi}{36}}$

6. $\frac{16\pi}{9} \left(\frac{180^\circ}{\pi}\right) = \boxed{320^\circ}$

7. $-525^\circ \left(\frac{\pi}{180^\circ}\right) = \frac{-525\pi}{180} = \boxed{-\frac{35\pi}{12}}$

8. $-\frac{7\pi}{6} \left(\frac{180^\circ}{\pi}\right) = \boxed{-210^\circ}$

9. $210^\circ \left(\frac{\pi}{180^\circ}\right) = \frac{210\pi}{180} = \boxed{\frac{7\pi}{6}}$