Use the Unit Circle to find the EXACT value of each. Rationalize denominators as necessary.

1.
$$\sin 330^{\circ} =$$

$$2. \cos \frac{5\pi}{4} =$$

3.
$$\cos(-210^{\circ}) =$$

4.
$$\sin 810^{\circ} =$$

5.
$$\cos \frac{8\pi}{3} =$$

6.
$$\tan 240^{\circ} =$$

7.
$$\tan 225^{\circ} =$$

8.
$$\tan \frac{7\pi}{2} =$$