

**Find the reference angle. Give answers in same form as given angles.**

1.  $380^\circ$                       2.  $-220^\circ$                       3.  $\frac{13\pi}{8}$                       4.  $\frac{-11\pi}{12}$

**$P$  is a point on the terminal side of angle  $\theta$  in standard position. Draw a figure and evaluate the six trigonometric functions of  $\theta$ .**

5.  $(-12, 5)$                       6.  $(1, -2)$

**Draw triangles and evaluate the function without using a calculator. Give exact answers in simplest form.**

7.  $\sin 315^\circ$                       8.  $\cos (-210)^\circ$                       9.  $\tan 390^\circ$
10.  $\sec 225^\circ$                       11.  $\csc \left( \frac{5\pi}{3} \right)$                       12.  $\cot \left( \frac{-5\pi}{6} \right)$

13. Evaluate the six trigonometric functions of  $180^\circ$ . You may use a calculator.

**Draw an angle of rotation in standard position. Then find a positive and a negative angle coterminal with the given angle. Give angles in same form as given angle.**

14.  $-125^\circ$                       15.  $\frac{17\pi}{6}$