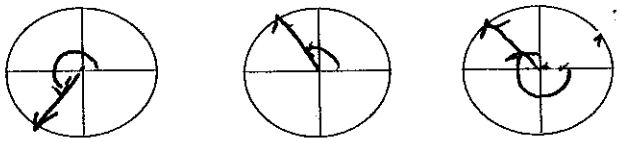
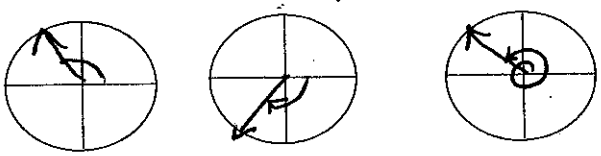
Warm-up: Radians

1) Sketch the angle in standard position and name the quadrant:

a) $\frac{5\pi}{4}$ Q3 b) $\frac{2\pi}{3}$ Q2 c) $-\frac{7\pi}{6}$



d) $\frac{3\pi}{5}$ Q2 e) $-\frac{7\pi}{12}$ Q3 f) $\frac{21\pi}{8}$ Q2

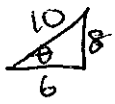


2) Unit Circle Mental Math: Convert without the calculator

$\frac{5\pi}{6}$ 150° $\frac{3\pi}{4}$ 225° $\frac{5\pi}{4}$ 315° $\frac{5\pi}{3}$ 300°

210° $\frac{7\pi}{6}$ 240° $\frac{4\pi}{3}$ 120° $\frac{2\pi}{3}$ 315° $\frac{7\pi}{4}$

3) If $\sec(B) = \frac{10}{6}$, find the value of the other five trig ratios:



$\sec = \frac{1}{\cos\theta} = \frac{H}{A}$

$6^2 + x^2 = 10^2$

$x^2 = 64$

$x = 8$

$\sin\theta = \frac{8}{10}$ $\csc\theta = \frac{10}{8}$ $\cos\theta = \frac{6}{10}$ $\sec\theta = \frac{10}{6}$ $\tan\theta = \frac{8}{6}$ $\cot\theta = \frac{6}{8}$