

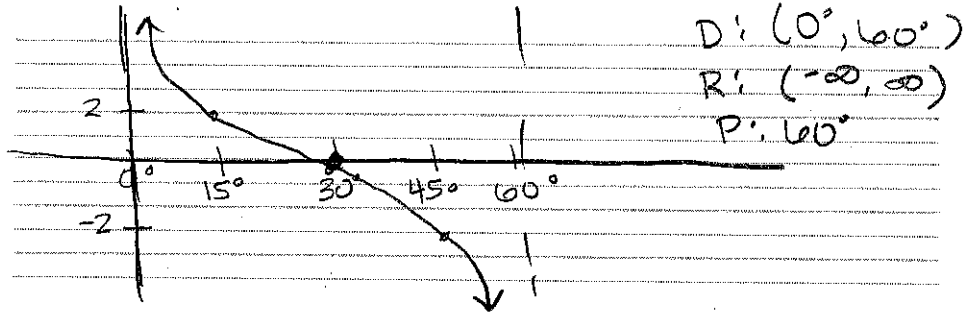
$0\pi \text{ \& } \pi$
 $0^\circ \text{ \& } 180^\circ$

Trig Graphing WS
 Cotangent Graphs

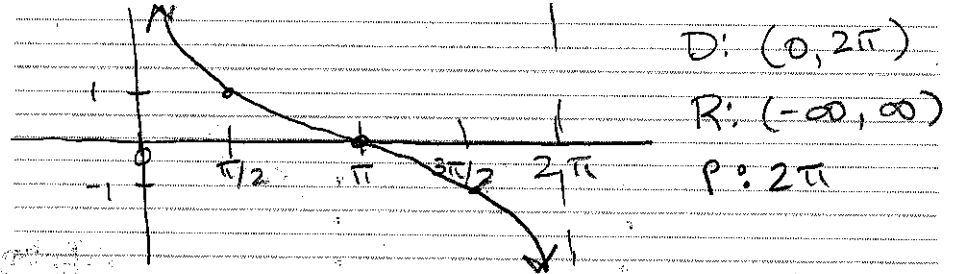
Name Key

Graph one complete period for each function and give the domain and range (in interval notation) of that period.

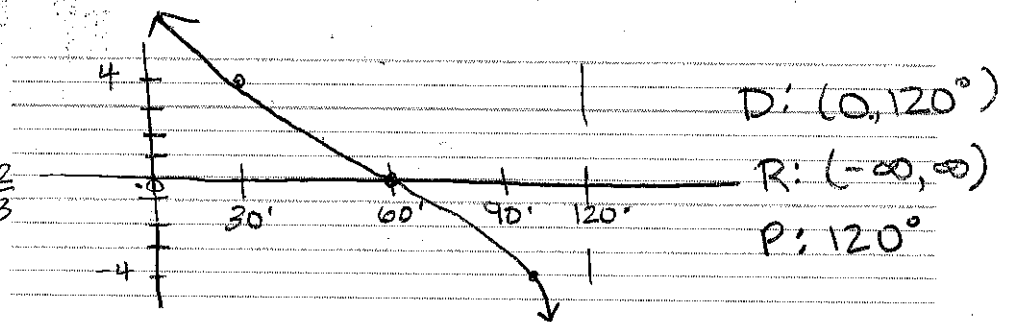
1) $y = 2 \cot 3\theta$
 $3\theta = 0 \quad 3\theta = 180^\circ$
 $\theta = 0^\circ \quad \theta = 60^\circ$



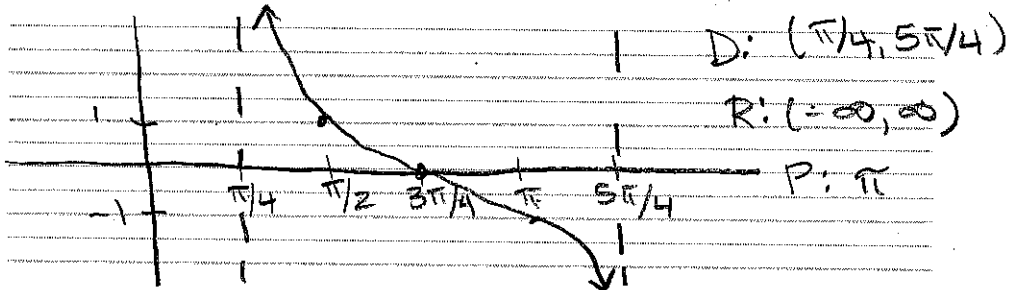
2) $y = \cot \frac{x}{2}$
 $\frac{x}{2} = 0 \quad \frac{x}{2} = \pi$
 $x = 0 \quad x = 2\pi$



3) $y = 4 \cot \frac{3\theta}{2}$
 $\frac{3\theta}{2} = 0 \quad \frac{3\theta}{2} = 180^\circ$
 $\theta = 0^\circ \quad \theta = 120^\circ$



4) $y = \cot\left(x - \frac{\pi}{4}\right)$
 $x - \frac{\pi}{4} = 0 \quad x - \frac{\pi}{4} = \pi$
 $x = \frac{\pi}{4} \quad x = \frac{5\pi}{4}$



5) $y = 2 \cot\left(\frac{x}{2} - \frac{\pi}{4}\right) + 1$
 $\frac{x}{2} - \frac{\pi}{4} = 0 \quad \frac{x}{2} - \frac{\pi}{4} = \pi$
 $\frac{x}{2} = \frac{\pi}{4} \quad \frac{x}{2} = \frac{5\pi}{4}$
 $x = \frac{\pi}{2} \quad x = \frac{5\pi}{2}$

