

1. Sketch
 - a. $\sin\theta$ where $-\pi < \theta \leq 2\pi$
 - b. $\cos\theta$ where $0^\circ \leq \theta \leq 450^\circ$
 - c. $\tan\theta$ where $\frac{\pi}{2} \leq \theta \leq \frac{\pi}{2}$
2. Find, without using a calculator, the exact value
 - a. $\sin 405^\circ$
 - b. $\tan 150^\circ$
 - c. $\cos 225^\circ$
 - d. $\tan \frac{3\pi}{2}$
 - e. $\cos(-120^\circ)$
 - f. $\sin 300^\circ$
3. Find θ between $-2\pi < \theta \leq 2\pi$ for
 - a. $-\sin(3\theta) = 0.312$
 - b. $5 = 2\tan\left(\frac{2\theta}{5}\right)$
 - c. $\cos\left(\frac{\pi}{3} - \theta\right) = 0.42$
 - d. $\sin\left(\frac{\theta}{3} - \frac{3\pi}{5}\right) = 0.17$
 - e. $\cos(-\theta) = -5\sin\theta$
 - f. as
4. Sketch
 - g. $\sin 2\theta$ where $-180^\circ \leq \theta \leq 180^\circ$
 - h. $\cos \frac{\theta}{4}$ where $-2\pi < \theta \leq 2\pi$
 - i. $\tan(-\theta)$ where $\frac{\pi}{2} \leq \theta \leq \frac{5\pi}{2}$
5. Solve
 - a. $\cos(3\theta + 45^\circ) = -0.5$ for $0^\circ \leq \theta \leq 360^\circ$
 - b. $2\sin^2\theta + \sin\theta - 1 = 0$ between $-2\pi < \theta \leq 2\pi$
6. Sketch between $-\pi < \theta \leq 2\pi$
 - a. $y = \sin(x) + 3$
 - b. $y = -\cos 3x$
 - c. $y = \tan\theta - 1$
7. Sketch $-360^\circ \leq \theta \leq 450^\circ$
 - a. $y = -\frac{1}{2}\cos 3x$
 - b. $y = 5\sin 2x$
 - c. $y = -2\tan 3x$
8. Sketch the graph and identify period and amplitude for $-180^\circ \leq \theta \leq 180^\circ$
 - a. $y = 4 \tan 6x$
 - b. $y = 2\cos \frac{3x}{4}$
 - c. $y = 3\sin \frac{x}{2}$
9. Sketch the graph and identify period and amplitude for $0^\circ \leq \theta \leq 360^\circ$
 - a. $y = \cos(x) + 3$
 - b. $y = -\sin(x) + \frac{3}{4}$
 - c. $y = 3 - 2\sin(x)$
10. Sketch the graph and identify period and amplitude for $-3\pi \leq \theta \leq 4\pi$
 - a. $y = 5\tan(3x)$
 - b. $y = -\cos\left(\frac{3}{4}x\right)$
 - c. $y = -2\sin(5x)$
11. Sketch the graph and identify period and amplitude for $-220^\circ \leq \theta \leq 280^\circ$
 - a. $y = 1 - 2\cos(x - 30^\circ)$
 - b. $y = -3 + 2\sin\left(3x + \frac{\pi}{4}\right)$
 - c. $y = -\frac{3}{4}\sin(2x - 45^\circ) + 5$
 - d. $y = \frac{1}{2} + 2\tan(x)$
 - e. $y = 0.7 \cos\left(3x - \frac{3\pi}{4}\right)$