Lesson 3.6 Practice: The Unit Circle

School Launch · Trigonometry · Unit 3: Angles, Radians and the Unit Circle · Worksheet A

Scientific calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Give the exact values: $\sin 90^\circ$, $\cos 90^\circ$. EASY

2. Give the exact values: $\sin 120^\circ$, $\cos 120^\circ$. EASY

3. Give the exact values: $\sin 45^\circ$, $\cos 45^\circ$. EASY

4. Give the exact values: $\sin \frac{\pi}{4}$, $\cos \frac{\pi}{4}$, $\tan \frac{\pi}{4}$. MEDIUM

5. Give the exact values: $\sin \frac{\pi}{3}$, $\cos \frac{\pi}{3}$, $\tan \frac{\pi}{3}$. MEDIUM

6. Give the exact values: $\sin \frac{\pi}{2}$, $\cos \frac{\pi}{2}$. MEDIUM

7. Give the exact values: $\sin \frac{5\pi}{3}$, $\cos \frac{5\pi}{3}$, $\tan \frac{5\pi}{3}$. MEDIUM

8. Give the exact values: $\sin \frac{7\pi}{6}$, $\cos \frac{7\pi}{6}$, $\tan \frac{7\pi}{6}$. HARD

9. Give the exact values: $\sin \frac{11\pi}{6}$, $\cos \frac{11\pi}{6}$, $\tan \frac{11\pi}{6}$. HARD

10. Give the exact values: $\sin \frac{5\pi}{4}$, $\cos \frac{5\pi}{4}$, $\tan \frac{5\pi}{4}$. HARD