Math 2412 - Pre-Calculus **_Quiz_** Name _____

Instructor: Fred Khoury

1) Find the Amplitude of $y = -5 \sin 3x$ 1) _____

A) $\frac{\pi}{3}$ B) $\frac{\pi}{5}$ C) $\frac{5}{3}$ D) 5

2) Find the period of $y = 5 \cos\left(\frac{1}{4}x + \frac{\pi}{3}\right)$. 2) _____

A) 5π B) 8π C) 4π D) $\frac{2\pi}{3}$

3) Find the phase shift of the function. $y = -2 \cos\left(\frac{1}{4}x + \frac{\pi}{4}\right)$ 3) _____

A) $-\pi$ B) $\frac{\pi}{16}$ C) $-\frac{\pi}{4}$ D) 2π

4) A ship sailing parallel to shore sights a lighthouse at an angle of 10° from its direction of travel. After traveling 5 miles farther, the angle is 23°. At that time, how far is the ship from the lighthouse? 4) _____

A) 5 mi B) 3.86 mi C) 2.22 mi D) 8.68 mi

5) Solve the triangle: a = 6, b = 14, c = 15 5) _____

A) A = 25.6°, B = 67.1°, C = 87.3° B) A = 21.6°, B = 69.1°, C = 89.3°
C) A = 23.6°, B = 69.1°, C = 87.3° D) no triangle

6) For what numbers x, $-2\pi \le x \le 2\pi$, does the graph of y = tan x have vertical asymptotes.? 6) _____

A) $-2\pi, -\pi, 0, \pi, 2\pi$ B) $-2, -1, 0, 1, 2$

C) $-\frac{3\pi}{2}, -\frac{\pi}{2}, \frac{\pi}{2}, \frac{3\pi}{2}$ D) none

Answer Key
Testname: MATH1316-QUIZ 2

1) D
2) B
3) A
4) B
5) C
6) C