

My signature on this assessment confirms I have used no outside resources and adhered to all assessment protocols assigned to this part of the daily grade/quiz/test/exam.

Accel Precalc

Daily Grade #25

Name _____

Unit #6: Graphs and Inverses of Trig Functions [60 total pts]

Part I: GRAPHING OR SCIENTIFIC CALCULATOR ALLOWED. NO UNIT CIRCLE

❖ For angle answers, respond in degrees or decimal radians, both rounded to nearest hundredth. MUST include unit with angle answer. For ratio answers, round to nearest hundredth.

➤ Evaluate each expression. [5 pts each]

1. $\sin^{-1}(-0.58)$

2. $\sec^{-1}(-1.58)$

3. $\cot^{-1}(3.2)$

4. $\cos^{-1}(1.32)$

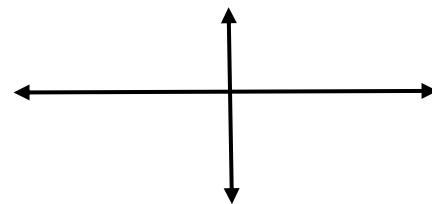
5. $\tan^{-1}(-2.56)$

❖ Find the sinusoidal equation in the form $y = A\sin[B(x - C)] + D$ for the given expression. You must show correct work to support all values to receive credit for answer. [10 pts]

Place your calculator in Radian mode. Set your Window: X values $[-2\pi, 2\pi]$ $\frac{\pi}{4}$ Y values $[-8, 8]$

To check answer, set your window: X values $[-\pi, \pi]$ $\frac{\pi}{4}$ Y values $[-8, 8]$

6. $y = 2\sin(3x) + 3\cos(3x)$ $y =$ _____



max = _____ min = _____ zero₁ = _____ zero₂ = _____

WORK:

A	B	C	D

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Unit #6: Graphs and Inverses of Trig Functions

Part II: 4-Function Calculator Only. Unit Circle Allowed.

- For angle answers, respond in degrees or π radians. Be sure to include unit with angle answer. For ratio answers, give exact values.
- Evaluate each expression. [5 pts each]

7. $\sin^{-1}(-1)$

8. $\cot^{-1}\left(\frac{-\sqrt{3}}{3}\right)$

9. $\sec^{-1}(2)$

10. $\cos^{-1}\left[\sin\left(\frac{-\pi}{4}\right)\right]$

11. $\sin\left[\cos^{-1}\left(\frac{5}{13}\right)\right]$

