

3.5 Derivatives of the Trigonometric Functions

MATH 205



Limits Involving

□ Recall

1. Show

2. Determine

3. Determine



Trigonometric Derivative Rules



Trigonometric Derivatives



Trigonometric Derivatives



Trigonometric Derivatives



Rules Amongst Rules



Rules Amongst Rules



Higher Order Trig Derivatives



Applications

15. Determine all points where $f(x)$ has horizontal tangent lines.



Applications

16. Find the equation of the tangent line to



Applications

17. Determine the velocity, acceleration, and jerk, at time t for a body moving in simple harmonic motion, such as a weight on a spring, with position