

**Calculus AB**  
2-4  
Chain Rule (with Trig)

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Find the derivative of the function. (pg 137)

46)  $\sin \pi x$

52)  $g(\theta) = \sec\left(\frac{1}{2}\theta\right) \tan\left(\frac{1}{2}\theta\right)$

54)  $g(v) = \frac{\cos v}{\csc v}$

60)  $h(t) = 2\cot^2(\pi t + 2)$

Evaluate the derivative of the function at the indicated point.

74)  $y = \frac{1}{x} + \sqrt{\cos x}, \quad \left(\frac{2}{\pi}, \frac{\pi}{2}\right)$

Find the second derivative of the function.

$$96) f(x) = \sec^2 \pi x$$

Assignment:

Pg. 137

45 - 81 odd

91 - 95 odd