

Lesson #25 Help

13. $f'(x) = \frac{-(1 + \csc x) \csc^2 x + \cot^2 x \csc x}{(1 + \csc x)^2}$

17. Rewrite original function using ratio identities! *

$$f'(x) = \frac{\sec^2 x - \tan^2 x}{(1 + x \tan x)^2}$$

Lesson #26 Help

13. Rewrite $f(x)$ as $(4 + (3x)^{1/2})^{1/2}$

$$f'(x) = \frac{1}{2} (4 + (3x)^{1/2})^{-1/2} \cdot \frac{1}{2} (3x)^{-1/2} \cdot 3$$

$$= \frac{3}{4 \sqrt{4 + \sqrt{3x}} (\sqrt{3x})}$$