

Math 1121
Homework #15

#11, #36

#11

$$y = -5x \ln(3x+2)$$

product rule!

$$y' = -5x \cdot \frac{1}{3x+2} \cdot 3 + \ln(3x+2) \cdot -5$$

#36

$$y = \log_7 \sqrt{4x-3}$$

$$= \log_7 (4x-3)^{1/2}$$

$$y' = \frac{1}{(4x-3)^{1/2} \ln 7} \cdot \frac{1}{2} (4x-3)^{-1/2} \cdot 4$$