## **Homework Topic 11**

1. Use the Chain Rule to determine the derivative of each of the following functions:

a. 
$$y = (x^2 + 1)^5$$

b. 
$$y = \sqrt{5 + 3x}$$

c. 
$$y = \frac{1}{(2x-7)^9}$$

$$d. \quad y = \frac{1}{\sqrt{2x - 7}}$$

e. 
$$y = \left[\frac{1}{\sqrt[3]{(2x-7)^2}} + (x^2+1)^5\right]^4$$