Higher-Order Derivatives

1. Find the second derivative of the function.
(similar to p.142 #1-12)

$$y = 2x^2 - 5x$$

2. Find the second derivative of the function.
(similar to p.142 #1-12)

$$f(x) = 5x^{-3}$$

3. Find the second derivative of the function.
(similar to p.142 #1-12)

$$f(x) = x\sqrt[5]{x}$$

4. Find the second derivative of the function.
(similar to p.142 #1-12)

$$y = 7\left(x^2 - 3x\right)^3$$

5. Find the second derivative and solve the equation f''(x) = 0
(similar to p.142 #31-34)

$$y = \frac{1}{12}x^4 - \frac{4}{3}x^3 + \frac{15}{2}x^2 - 2x + 1$$

6. Find the second derivative and solve the equation f''(x) = 0
(similar to p.142 #31-34)

$$f(x) = x\sqrt{x^2 - 9}$$