

Calculus:

Homework
10/30-11/3

on: Tuesday: test

due: Thursday: read p. 220-225

1. pg. 227 / #16, 17, 21, 27, 30,33
2. If $f(x) = \frac{(3x+7)^4}{(4-x)^3}$, find $f'(x)$.
3. If $y = \frac{2}{7x^2+3x-1}$, find y' .
4. Write an equation of the tangent line to the curve $y = (x^2 - 5x + 2)^3$ at the point whose abscissa is 4.

Friday:

1. pg. 228 / #76, 82abd
2. Write an equation of the normal line to the curve $y = (x + 3)^2(2x + 1)^3$ at $x = -1$.
3. Find the derivative of $y = (x^2 + 1)^2$ with respect to x^2 .
4. Let f and g be defined by $f(x) = x^2 - 3$ and $g(x) = 3x + 4$ with $h(x) = f(g(x))$. Find $h'(2)$.
5. If $x = 2t - 7$ and $y = t^3 + 4$, find $\frac{dy}{dx}$.

Monday: read pp. 214-219, 226

1. pg. 219 / #2, 4, 5, 9, 11, 24
2. pg. 227 / #2, 3, 5, 8, 9, 11, 13, 14