

Test #2 Review Questions

Ch. 10.1-10.5 ; Ch ~~10~~ 11.1-11.3

on the Test

I Find the intervals where the functions are increasing/decreasing and all relative max/min/horizontal points of inflection (if any):

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

2) $f(x) = x^3 - \frac{3}{2}x^2 - 18x + 5$

3) $y = \frac{1}{6}x^6 - x^4 + 7$

4) $g(x) = -(x-3)^{2/3}$

5) $y = x^{2/3}$

Sketch the graph!

II Find the intervals where the functions are concave up/down and all points of inflection:

1) $y = x^3 - x^2$

2) $y = x^3 - 3x^2 + 6$

3) $y = x^4 - 8x^3 + 16x^2$

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