

These are the answer from the problems we did in class on the last day –email me if something looks wrong

1. $-\frac{1}{3}x^3 + x^2 + C$

2. 15 mph

3. The average rate of change from (2,9) to (5,51) is 14.

4. 12

5. $\frac{-3}{x^2}$

6. $\frac{5}{2\sqrt{x}}$

7. $\frac{3x}{\sqrt{3x^2 + 2}}$

8. $20(2x+5)^9(x-3e^{2x}) + (2x+5)^{10}(1-6e^{2x})$

9. $\frac{(2x-1)(5\cos(x)-6x^2)-2(5\sin(x)-2x^3)}{(2x-1)^2}$

10. $\frac{4}{3}\sqrt{x^3} + C$

11. $\frac{-1}{20} = -0.05$

12. $\frac{-3}{4x}$

13. $A = B', B = C'$

14. 52 ft/sec going down

15. 52 ft/sec (it hits the ground at t=3sec)

16. $A_1 - A_2 + A_3$

17. $\int_{-3}^0 f(x)dx$

18. 0

19. $\int_7^8 f(x)dx, \int_0^1 f(x)dx, \int_0^3 f(x)dx, \int_2^4 f(x)dx,$

20. $v(t) = -32t + 60$

20. $h(t) = -16t^2 + 60t + 30$

21. (-2,44)

22. b: concave down

23. e: cannot be determined