**Math 1325 - Calculus with Application Exam 4 *Review***

*Instructor*: Fred Khoury

**Find the indefinite integral (general solution)**

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 
11. 
12. 
13. 
14. 
15. 
16. 

**Find the particular solution at the given initial condition(s)**

1. 
2. 
3. 
4. 
5. 

**Find the indefinite integral (use integration by parts):**

1. 
2. 
3. 
4. 
5. 

***Evaluate the definite integral***

1. 
2. 
3. 
4. 
5. 
6. 
7. Find the area of the region bounded by . The points of intersection are (0, 6) and (3, 3).
8. Find the area of the region bounded by . The points of intersection are (2, 15) and (6, 7).
9. If the monthly profit in thousands of dollars from the January 2000 until December 2007 can be approximated by the function , where x = 0 represents January 2000 and  represents December 2007. What is the average monthly profit for the years 2000 – 2007?

***Solution***

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 
11. 
12. 
13. 
14. 
15. 
16. 
17. 
18. 
19. 
20. 
21. 
22. 
23. 
24. 
25. 
26. 
27. 
28. 
29. 1.43
30. 1.8986
31. 
32. 
33. 9
34. 10.67
35. $865.60





































































Evaluate the integral 

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|  |  |  |

***Solution***

Let: 











Evaluate the integral 

***Solution***















Evaluate the integral 

***Solution***

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