

NAME: _____

REVIEW #7
INTEGRATION
JCC MAT 171

DATE: _____

Integrate and evaluate.

1. $\int_3^4 2dx$

2. $\int_2^1 dx$

3. $\int_1^2 (x + x^2)dx$

4. $\int_3^2 (3x-1)(2x+3)dx$

5. $\int_1^0 \frac{x^2 - 25}{x - 5} dx$

6. $\int_{\pi/2}^0 3\cos x dx$

7. $\int_0^2 (4x^3 - 3x^2 + 7x - 8)dx$

8. $\int_0^8 (2 - \sqrt[3]{x})^2 dx$

9. $\int_0^{\pi/3} \sec^2 x dx$

10. $\int_0^1 \frac{x^2}{(x^3 + 1)^5} dx$

11. $\int_0^1 x\sqrt{9 - 5x^2} dx$

12. $\int_0^1 (2x + 3)^{10} dx$

Integrate.

13. $\int \frac{1}{\sqrt[3]{5x+1}} dx$

14. $\int \frac{2x^3 + 1}{(x^4 + 2x)^3} dx$

15. $\int 2\sin 3x dx$

16. $\int (2 + \cos 3x) dx$

17. $\int \sqrt{4 - 3x} dx$

18. $\int \frac{1}{7x+5} dx$

19. $\int \frac{4x}{x^2 + 7} dx$

20. $\int \frac{\sin x}{9 + \cos x} dx$

21. $\int \frac{(\ln x)^2}{x} dx$

22. $\int \frac{x^2 - 4}{x} dx$

23. $\int \frac{x^2 + x + 1}{x^2 + 1} dx$

24. $\int \frac{\sec^2 x}{\tan x} dx$

25. $\int \frac{\ln(x+1)}{(x+1)} dx$

26. $\int \frac{1}{x^2 e^{\frac{3}{x}}} dx$

27. $\int \frac{e^{\frac{3}{x}}}{x^2} dx$

28. $\int (-4x^3)(e^{-x^4}) dx$

29. $\int e^{(3x+1)} dx$

30. $\int x^2 e^{(x^3+1)} dx$