

ANSWERS to the Midterm I for Math 141, Fall 2004

- 1.a
- 2.b
- 3.a
- 4.e
- 5.e
- 6.d
- 7.b
- 8.c
- 9.e
- 10.a
- 11.c
- 12.a

13. $\frac{x^2 e^x \sqrt{x-1}}{x^3 - 2} \left(\frac{2}{x} + 1 + \frac{1}{2(x-1)} - \frac{3x^2}{x^3 - 2} \right)$

14. $1 - \frac{2}{e}$

15. $\frac{9\pi}{16}$

16. $\frac{1}{2} \ln|x+1| + \frac{3}{4} \ln(x^2+1) - \frac{3}{2} \tan^{-1} x + C$