

Spring 2004 Final Exam Answers (Form A)

1. d
2. c
3. a
4. b
5. a
6. c
7. c
8. c
9. a
10. b
11. e
12. b
13. d
14. a
15. a) CC b) AC c) D d) AC
16. a) C to 2 b) C to 1 c) D
17. $x - 2\sqrt{2} + C$
18. $R = 9/2$, the interval $-6 < x \leq 3$
- 19.

a)
$$\sum_{n=0}^{\infty} \frac{f^{(n)}(a)(x-a)^n}{n!}$$

b) $T_3(x) = e^2 + e^2(x-2) + \frac{e^2(x-2)^2}{2} + \frac{e^2(x-2)^3}{6}$

c) $|E| \leq \frac{e^{2.5}}{384}$

20. a) See the jpg file for the picture

b) $A = \frac{1}{2} \int_0^{2\pi} (4 - 4 \sin \theta)^2 d\theta$