Fall 2003 Midterm II answers

1. a. NOTE: This topic is not included in Math141 SP05 Midterm II.
2. b
3. d
4. b
5. b
6. b
7. (I) converges; (II) converges; (III) diverges.
8. a) converges to 0; b) converges to $\frac{2}{3}$; c) diverges.
9. The integral converges to $\frac{3}{2} - \frac{3}{2^{17}}$. One has to break up the integral at $x = 2$.
10. The series converges by the Integral Test.
11. The series diverges by the Limit Comparison Test with $\sum \frac{1}{n}$ (or $\sum \frac{2}{n}$).