## Series Practice Solutions

- 1. Converges Conditionally by Alternating Series and Limit Comparison Tests.
- 2. Diverges by Divergence Test.
- 3. Converges Conditionally by Alternating Series and Direct Comparison Tests.
- 4. Converges Absolutely by Direct Comparison to a Geometric Series.
- 5. Converges Absolutely by Direct Comparison to a sum of Geometric Series.
- 6. Absolutely Convergent Telescoping Series.
- 7. Converges Absolutely by Root Test.
- 8. Converges Absolutely by Direct Comparison to p-series.
- 9. Converges Absolutely by Root Test.
- 10. Converges Conditionally by Alternating Series and Cauchy Condensation Tests.
- 11. Converges Absolutely by Root Test.
- 12. Converges Absolutely by Limit Comparison and Integral Tests.
- 13. Diverges by Divergence Test.
- 14. Converges Absolutely by Root Test.
- 15. Converges Absolutely by Direct Comparison to p-series.
- 16. Converges Absolutely by Direct Comparison and Root Tests.
- 17. Diverges by Divergence or Ratio Tests.
- 18. Converges Absolutely by Ratio Test.
- 19. Diverges by Ratio Test.