Section B Comprehensive Review - Answer Key

1. $a_1 = 6, \quad a_n = 3a_{n-1}$
2. $a_1 = 5, \quad a_n = 4a_{n-1}$
3. $a_1 = 90, \quad a_n = \frac{1}{3}a_{n-1}$
4. $a_1 = 12, \quad a_n = \frac{1}{2}a_{n-1}$
5. $a_1 = 8, \quad a_n = -2a_{n-1}$
6. $a_1 = 3, \quad a_n = -2a_{n-1}$
7. $a_1 = 64, \quad a_n = -\frac{1}{2}a_{n-1}$
8. $a_1 = 162, \quad a_n = -\frac{1}{3}a_{n-1}$
9. $10,\ 20,\ 40,\ 80,\ 160,\ 320$
10. $7,\ 21,\ 63,\ 189,\ 567,\ 1701$
11. $81,\ 27,\ 9,\ 3,\ 1$
12. $64,\ 32,\ 16,\ 8,\ 4$
13. $4,\ -12,\ 36,\ -108,\ 324$
14. $5,\ -10,\ 20,\ -40,\ 80$
15. $40,\ -20,\ 10,\ -5,\ \frac{5}{2},\ -\frac{5}{4}$
16. $96,\ -48,\ 24,\ -12,\ 6,\ -3$
17. $r = \frac{1}{4}; a_1 = 6400, \quad a_n = \frac{1}{4}a_{n-1}$
18. $r = \frac{1}{4}; a_1 = 4096, \quad a_n = \frac{1}{4}a_{n-1}$
19. $r = \frac{4}{5}; a_1 = 625, \quad a_n = \frac{4}{5}a_{n-1}$
20. $r = \frac{3}{5}; a_1 = 625, \quad a_n = \frac{3}{5}a_{n-1}$
21. $a_1 = 64, \quad a_n = 1.25a_{n-1}$
22. $a_1 = 80, \quad a_n = 1.5a_{n-1}$
23. $a_1 = 2500, \quad a_n = 0.8a_{n-1}$
24. $a_1 = 3000, \quad a_n = 0.75a_{n-1}$