Section A Comprehensive Review - Answer Key

1. $r = 2$; next terms: $144,\ 288,\ 576$
2. $r = 3$; next terms: $567,\ 1701,\ 5103$
3. $r = \frac{1}{4}$; next terms: $1,\ \frac{1}{4},\ \frac{1}{16}$
4. $r = \frac{1}{5}$; next terms: $1,\ \frac{1}{5},\ \frac{1}{25}$
5. Yes; $r = 3$.
6. Yes; $r = 3$.
7. No; the consecutive ratios are not constant.
8. No; the consecutive ratios are not constant.
9. Yes; $r = -\frac{1}{2}$.
10. Yes; $r = -\frac{1}{2}$.
11. $-4,\ 8,\ -16,\ 32,\ -64$
12. $-3,\ 9,\ -27,\ 81,\ -243$
13. $a_7 = 2916$
14. $a_8 = 256$
15. $a_6 = 5$
16. $a_7 = 3$
17. $a_5 = 80$
18. $a_6 = -96$
19. $r = 2$; value = 768
20. $r = 2$; value = 1200
21. $r = \frac{1}{2}$; value = 100
22. $r = \frac{1}{2}$; value = 60
23. $a_6 = 1$
24. $a_7 = 1$