Recursive Formulas from Tables and Contexts - Answer Key

1. $r = \frac{1}{3}$; $a_1 = 8100$, $a_n = \frac{1}{3}a_{n-1}$
2. $r = 3$; $a_1 = 18$, $a_n = 3a_{n-1}$
3. $r = \frac{1}{2}$; $a_1 = 16000$, $a_n = \frac{1}{2}a_{n-1}$
4. $r = 4$; $a_1 = 5$, $a_n = 4a_{n-1}$
5. $a_1 = 80$, $a_n = 1.25a_{n-1}$
6. $a_1 = 1800$, $a_n = 0.8a_{n-1}$
7. $a_1 = 30$, $a_n = 3a_{n-1}$
8. $a_1 = 900$, $a_n = \frac{1}{3}a_{n-1}$
9. $r = 5$; terms: $8,\ 40,\ 200,\ 1000,\ 5000$
10. $r = \frac{1}{2}$; terms: $96,\ 48,\ 24,\ 12,\ 6$