

Chapter 6

Exercise 6B

9. (a) $7(13^k)$

10. (a) $144k - 198$

Mixed exercise 6E

2. (a) $\mathbf{B}^2 = \begin{pmatrix} 1 & 0 \\ 0 & 9 \end{pmatrix}$, $\mathbf{B}^3 = \begin{pmatrix} 1 & 0 \\ 0 & 27 \end{pmatrix}$

4. (a) 7, 29, 133, 641

5. (b) $\begin{pmatrix} 1-8n & -16n \\ 4n & 8n+1 \end{pmatrix}$

8. (a) $2, \frac{5}{4}, \frac{11}{16}, \frac{17}{64}, -\frac{13}{256}$