

Worksheet 8: Counting up to symmetry – answers

1. (a) $26^2 = 676$.
(b) 351.
2. (a) $2^5 = 32$;
(b) $3^5 = 243$;
(c) $7^5 = 16807$.
3. (a) 4;
(b) 10;
(c) 84.
4. (a) 13;
(b) 92;
(c) 10528.
5. (a) 6. $b^4 + b^3g + 2b^2g^2 + bg^3 + g^4$.
(b) 140. $b^9 + 3b^8g + 10b^7g^2 + 22b^6g^3 + 34b^5g^4 + 34b^4g^5 + 22b^3g^6 + 10b^2g^7 + 3bg^8 + g^9$.
(c) 36. $b^6 + 3b^5g + 9b^4g^2 + 10b^3g^3 + 9b^2g^4 + 3bg^5 + g^6$.