1. (a) Simplify $m^3 \times m^6$

   (b) Simplify $\dfrac{p^8}{p^2}$

   (c) Simplify $(2n^3)^4$

2. (a) Simplify $m^6 \times m^7$

   (b) Simplify m^0

3. (a) Simplify $m^5 \div m^3$

   (b) Simplify $5x^4y^3 \times x^2y$

4. (a) Simplify $a^4 \times a^5$

   (b) Simplify $\dfrac{45e^6f^8}{5ef^2}$

5. (a) Simplify $m^2 \times m^4$

   (b) Simplify $y^7 \div y^5$

   (c) Simplify $(m^3)^5$

6. (a) Simplify $p^2 \times p^7$

   (b) Simplify $\dfrac{3q^4 \times 2q^5}{q^3}$

   (c) Simplify $(2xy^3)^5$

7. (a) Simplify $15y^6 \div 3y^2$

   (b) Simplify $7wx^2 \times 3w^3x$

8. (a) Simplify $(2^2)^3$

   (b) Simplify $(\sqrt{3})^2$

   (c) Simplify $\sqrt{2^4 \times 9}$

   (d) Simplify 4^{-2}

9. (a) Write the value of $49^{\frac{1}{2}}$

   (b) Simplify $\dfrac{x^6}{x^2}$

   (c) Simplify $(y^4)^3$

10. Simplify $\dfrac{15a^3b^7}{3a^2b^3}$

11. $7^5 \times 7^6 = 7^3 \times 7^k$

Find the value of k

12. (a) Simplify $p^3 \times p^2$

(b) Simplify $\dfrac{q^3 \times q^4 \times q}{q^3}$

13. Find the value of (i) $36^{\frac{1}{2}}$

(ii) 4^{-2}

14. (a) Write as a power of 7 (i) $7^8 \div 7^3$

(ii) $\dfrac{7^2 \times 7^3}{7}$

(b) Write down the reciprocal of 2

15. (a) Simplify $12y^3 \div 3y^5$

(b) Simplify $2w^3x^2 \times 3w^4x$

16. (a) Work out the value of (i) 4^2

(ii) $\sqrt{64}$

(ii) 3×2^3

17. Simplify (i) $x^4 \times x^5$

(ii) $\dfrac{p^8}{p^3}$

(iii) $3s^2t^3 \times 4s^4t^2$

(iv) $(q^3)^4$

18. Simplify fully (i) $(p^3)^3$

(ii) $\dfrac{3q^5 \times 2q^5}{q^3}$