1. (a) Write down the value of $\left(\dfrac{16}{9}\right)^{1}$

    (b) Write down the value of 6^{1}

2. (a) Write down the value of 16^{-1}

    (b) Write down the reciprocal of 3

3. (a) Complete this
    $$\sqrt{100} = 100^{\cdots} = \ldots$$
    (b) Write down the value of $\quad 25^{\frac{1}{2}}$

4. (a) Write down the reciprocal of $\dfrac{1}{25}$

    (b) Write down the reciprocal of $\dfrac{25}{9}$

    (c) Write down the value of $\left(\dfrac{1}{49}\right)^{-1}$

    (d) Write down the value of $\left(\dfrac{4}{9}\right)^{-1}$

5. (a) Write down the value of $\left(\dfrac{3}{8}\right)^{0}$

    (b) Write down the value of 64^{0}

6. (a) Evaluate 6^{-2} {Questions cover knowledge of 2 to 10 squared and 2 to 5 cubed}

    (b) Write down the value of 4^{-3}

7. (a) Write down the value of $64^{\frac{1}{2}}$

    (b) Evaluate $144^{\frac{1}{2}}$

8. (a) Write down the value of $\left(\dfrac{25}{64}\right)^{\frac{1}{2}}$

    (b) Evaluate $\left(\dfrac{36}{49}\right)^{\frac{1}{2}}$

9. Write down the value of $\left(\dfrac{4}{9}\right)^{-2}$

10. $3^n = \dfrac{1}{9}$ OR $2^p = 32$

    (a) Write down the value of n

    (b) Write down the value of p

11. $2^7 \div 2^q = 2^4$ OR $2^4 \times 2^x = 2^9$

    (a) Work out the value of q

    (b) Write down the value of x

12. (a) Evaluate $64^{-\frac{1}{2}}$

    (b) Evaluate $64^{-\frac{1}{3}}$

    (c) Evaluate $\left(\dfrac{125}{64}\right)^{\frac{1}{3}}$

13. (a) Evaluate $\left(\dfrac{9}{16}\right)^{\frac{3}{2}}$ {number OR fraction to the $\pm\dfrac{2}{3}$ OR $\pm\dfrac{3}{2}$}

    (b) Find the value of $\left(\dfrac{100}{9}\right)^{-\frac{3}{2}}$

    (c) Find the value of $8^{\frac{2}{3}}$

14. $3^2 \div 3^y = 3^5$ OR $2^5 \times 2^p = 2^2$

    (a) Work out the value of y

    (b) Write down the value of p