1. Evaluate.

   (i) 3^{-2} (ii) $(-4)^{-2}$ (iii) $\left(\dfrac{1}{2}\right)^{-5}$

2. Simplify and express the result in power notation with positive exponent.

   (i) $(-4)^5 \div (-4)^8$ (ii) $\left(\dfrac{1}{2^3}\right)^2$

   (iii) $(-3)^4 \times \left(\dfrac{5}{3}\right)^4$ (iv) $(3^{-7} \div 3^{-10}) \times 3^{-5}$ (v) $2^{-3} \times (-7)^{-3}$

3. Find the value of.

   (i) $(3^0 + 4^{-1}) \times 2^2$ (ii) $(2^{-1} \times 4^{-1}) \div 2^{-2}$ (iii) $\left(\dfrac{1}{2}\right)^{-2} + \left(\dfrac{1}{3}\right)^{-2} + \left(\dfrac{1}{4}\right)^{-2}$

   (iv) $(3^{-1} + 4^{-1} + 5^{-1})^0$ (v) $\left\{\left(\dfrac{-2}{3}\right)^{-2}\right\}^2$

4. Evaluate (i) $\dfrac{8^{-1} \times 5^3}{2^{-4}}$ (ii) $(5^{-1} \times 2^{-1}) \times 6^{-1}$

5. Find the value of m for which $5^m \div 5^{-3} = 5^5$.

6. Evaluate (i) $\left\{\left(\dfrac{1}{3}\right)^{-1} - \left(\dfrac{1}{4}\right)^{-1}\right\}^{-1}$ (ii) $\left(\dfrac{5}{8}\right)^{-7} \times \left(\dfrac{8}{5}\right)^{-4}$

7. Simplify.

   (i) $\dfrac{25 \times t^{-4}}{5^{-3} \times 10 \times t^{-8}}$ $(t \neq 0)$ (ii) $\dfrac{3^{-5} \times 10^{-5} \times 125}{5^{-7} \times 6^{-5}}$