1. Evaluate:
(i) 4^{-3}
(ii) $(1/2)^{-5}$
(iii) $(4/3)^{-3}$
(iv) $(-3)^{-4}$
(v) $(-2/3)^{-5}$

2. Evaluate:
(i) $(5/3)^2 \times (5/3)^2$
(ii) $(5/6)^6 \times (5/6)^{-4}$
(iii) $(2/3)^{-3} \times (2/3)^{-2}$
(iv) $(9/8)^{-3} \times (9/8)^2$

3. Evaluate:
(i) $(5/9)^{-2} \times (3/5)^{-3} \times (3/5)^0$
(ii) $(-3/5)^{-4} \times (-2/5)^2$
(iii) $(-2/3)^{-3} \times (-2/3)^{-2}$

4. Evaluate:
(i) $\{(-2/3)^2\}^{-2}$
(ii) $[\{(-1/3)^2\}^{-2}]^{-1}$
(iii) $\{(3/2)^{-2}\}^2$

5. Evaluate: $\{(1/3)^{-3} - (1/2)^{-3}\} \div (1/4)^{-3}$

6. Evaluate: $\{(4/3)^{-1} - (1/4)^{-1}\}^{-1}$

7. Evaluate: $[5^{-1} \times 3^{-1}]^{-1} \div 6^{-1}]$

8. Find the value of x for which $(5/3)^{-4} \times (5/3)^{-5} = (5/3)^{3x}$

9. Find the value of x for which $(4/9)^4 \times (4/9)^{-7} = (4/9)^{2x-1}$

10. By what number should $(-6)^{-1}$ be multiplied so that the product becomes 9^{-1}?

11. By what number should $(-2/3)^{-3}$ be divided so that the quotient may be $(4/27)^{-2}$?

12. If $5^{2x+1} \div 25 = 125$, find the value of x.

13. Find:
(i) $64^{\frac{1}{2}}$ (ii) $32^{\frac{1}{5}}$ (iii) $125^{\frac{1}{3}}$

14. Find
(i) $9^{\frac{3}{2}}$ (ii) $32^{\frac{2}{5}}$ (iii) $16^{\frac{3}{4}}$ (iv) $125^{\frac{-1}{3}}$

15. Simplify:
(i) $2^{\frac{2}{3}} \cdot 2^{\frac{1}{5}}$ (ii) $\left(\frac{1}{3^3}\right)^7$ (iii) $\dfrac{11^{\frac{1}{2}}}{11^{\frac{1}{4}}}$ (iv) $7^{\frac{1}{2}} \cdot 8^{\frac{1}{2}}$