

A. 1. Evaluate:

(i) 3^{-4} (ii) $(-4)^3$ (iii) $\left(\frac{3}{4}\right)^{-2}$ (iv) $\left(\frac{-2}{3}\right)^{-5}$ (v) $\left(\frac{5}{7}\right)^0$

2. Evaluate: $\left\{\left(\frac{-2}{3}\right)^3\right\}^{-2}$

3. Simplify: $(3^{-1} + 6^{-1}) \div \left(\frac{3}{4}\right)^{-1}$

4. By what number should $\left(\frac{-2}{3}\right)^{-3}$ be divided so that the quotient is $\left(\frac{4}{9}\right)^{-2}$?

5. By what number should $(-3)^{-1}$ be multiplied so that the product becomes 6^{-1} ?

6. Express each of the following in standard form:

(i) 345 (ii) 180000 (iii) 0.000003 (iv) 0.000027

B. Mark (\checkmark) against the correct answer in each of the following:

7. The value of $(-3)^{-3}$ is

(a) -27 (b) 9 (c) $\frac{-1}{27}$ (d) $\frac{1}{27}$

8. The value of $\left(\frac{3}{4}\right)^{-3}$ is

(a) $\frac{-27}{64}$ (b) $\frac{64}{27}$ (c) $\frac{-9}{4}$ (d) $\frac{27}{64}$

9. $(3^{-6} \div 3^4) = ?$

(a) 3^{-2} (b) 3^2 (c) 3^{-10} (d) 3^{10}

10. If $\left(\frac{5}{12}\right)^{-4} \times \left(\frac{5}{12}\right)^{3x} = \left(\frac{5}{12}\right)^5$, then $x = ?$

(a) -1 (b) 1 (c) 2 (d) 3

11. $\left(\frac{3}{5}\right)^0 = ?$

(a) $\frac{5}{3}$ (b) $\frac{3}{5}$ (c) 1 (d) 0

12. $\left(\frac{-6}{5}\right)^{-1} = ?$

(a) $\frac{6}{5}$ (b) $\frac{-6}{5}$ (c) $\frac{5}{6}$ (d) $\frac{-5}{6}$

13. $\left(\frac{-1}{3}\right)^3 = ?$

(a) $\frac{-1}{9}$ (b) $\frac{1}{9}$ (c) $\frac{-1}{27}$ (d) $\frac{1}{27}$