

$$\begin{aligned} \text{2 (i)} \quad & \frac{2^3 \times 3^4 \times 4^1}{3 \times 3 \times 8} \\ & = \frac{2^3 \times 3^{4-1}}{2^3} \\ & = 3^3 \end{aligned}$$

$$\begin{aligned} \text{(v)} \quad & \frac{3^7}{3^4 \times 3^3} \\ & = \frac{3^7}{3^7} \\ & = 1 \end{aligned}$$

$$\begin{aligned} \text{(ii)} \quad & [(5^2)^3 \times 5^4] \div 5^7 \\ & = [5^{2 \times 3} \times 5^4] \div 5^7 \\ & = 5^{6+4} \div 5^7 \\ & = 5^{10} \div 5^7 \\ & = 5^{10-7} \\ & = 5^3 \end{aligned}$$

$$\begin{aligned} \text{(vi)} \quad & 2^0 + 3^0 + 4^0 \\ & = 1 + 1 + 1 \\ & = 3 \end{aligned}$$

$$\begin{aligned} \text{(iii)} \quad & 25^4 \div 5^3 \\ & = (5^2)^4 \div 5^3 \\ & = 5^8 \div 5^3 \\ & = 5^{8-3} \\ & = 5^5 \end{aligned}$$

$$\begin{aligned} \text{(vii)} \quad & 2^0 \times 3^0 \times 4^0 \\ & = 1 \times 1 \times 1 \\ & = 1 \end{aligned}$$

$$\begin{aligned} \text{(viii)} \quad & (3^0 + 2^0) \times 5^0 \\ & = (1+1) \times 1 \\ & = 2 \times 1 \\ & = 2 \end{aligned}$$

$$\begin{aligned} \text{(iv)} \quad & \frac{3 \times 7^2 \times 11^8}{21 \times 11^3} \\ & = \frac{\cancel{3} \times 7^2 \times 11^{8-3}}{\cancel{3} \times 7} \\ & = 7^{2-1} \times 11^5 \\ & = 7 \times 11^5 \end{aligned}$$

$$\begin{aligned} \text{(ix)} \quad & \frac{2^8 \times a^5}{4^3 \times a^3} \\ & = \frac{2^8 \times a^{5-3}}{(2^2)^3} \\ & = \frac{2^8 \times a^2}{2^6} \\ & = 2^{8-6} \times a^2 = 2^2 \times a^2 \end{aligned}$$