



1. $(2 \times -9 \times 6)^9 =$

- (i) $2^9 \times (-9)^{10} \times 6^{10}$
- (ii) $2^9 \times (-12)^9 \times 4^9$
- (iii) $2^9 \times (-9)^8 \times 6^8$
- (iv) $2^9 \times (-7)^9 \times 8^9$
- (v) $2^9 \times (-9)^9 \times 6^9$

2. $(\frac{-6}{1} \times \frac{-7}{1})^{-6} =$

- (i) $(-6)^{-6} \times (-5)^{-6}$
- (ii) $(-6)^{-6} \times (-7)^{-6}$
- (iii) $(-6)^{-6} \times (-7)^{-7}$
- (iv) $(-6)^{-6} \times (-9)^{-6}$
- (v) $(-6)^{-6} \times (-7)^{-5}$

3. $(\frac{2}{1} \times (\frac{-5}{8}) \times \frac{7}{3})^{-4} =$

- (i) $2^{-4} \times (\frac{-5}{8})^{-5} \times (\frac{7}{3})^{-5}$
- (ii) $2^{-4} \times (\frac{-7}{8})^{-4} \times (\frac{5}{3})^{-4}$
- (iii) $2^{-4} \times (\frac{-5}{8})^{-3} \times (\frac{7}{3})^{-3}$
- (iv) $2^{-4} \times (\frac{-5}{8})^{-4} \times (\frac{7}{3})^{-4}$

- (v) $2^{-4} \times (\frac{-3}{8})^{-4} \times 3^{-4}$

4. $(\frac{3}{2} \times \frac{5}{4})^{-3/7} =$

- (i) $(\frac{3}{2})^{(-3/7)} \times (\frac{5}{4})^{(-1/3)}$
- (ii) $(\frac{3}{2})^{(-3/7)} \times (\frac{3}{4})^{(-3/7)}$
- (iii) $(\frac{3}{2})^{(-3/7)} \times (\frac{7}{4})^{(-3/7)}$
- (iv) $(\frac{3}{2})^{(-3/7)} \times (\frac{5}{4})^{(-3/5)}$

- (v) $(\frac{3}{2})^{(-3/7)} \times (\frac{5}{4})^{(-3/7)}$

5. Simplify the expression $3^5 \times 3^5 \times 3^5$

- (i) 5^{15}
- (ii) 3^{14}
- (iii) 3^{16}
- (iv) 3^{13}
- (v) 3^{15}

6. Simplify the expression $3^{-2} \times 3^{-2} \times 3^{-2}$

- (i) 3^{-5}
- (ii) 3^{-7}
- (iii) 1
- (iv) 6^{-6}
- (v) 3^{-6}

7. Simplify the expression $(-9)^8 \times (-9)^8$

- (i) $(-9)^{16}$
- (ii) $(-9)^{17}$
- (iii) $(-9)^{15}$
- (iv) $(-6)^{16}$
- (v) $(-11)^{16}$

8. Simplify the expression $(-5)^{-9} \times (-5)^{-9} \times (-5)^{-9}$

- (i) $(-3)^{-27}$ (ii) $(-5)^{-28}$ (iii) $(-7)^{-27}$ (iv) $(-5)^{-26}$ (v) $(-5)^{-27}$

9. Simplify the expression $\left(\frac{7}{4}\right)^{-4} \times \left(\frac{7}{4}\right)^{-4}$

- (i) $\left(\frac{7}{4}\right)^{-7}$ (ii) $\left(\frac{9}{4}\right)^{-8}$ (iii) $\left(\frac{7}{4}\right)^{-8}$ (iv) $\left(\frac{5}{4}\right)^{-8}$ (v) $\left(\frac{7}{4}\right)^{-9}$

10. Simplify the expression $\left(\frac{-8}{5}\right)^3 \times \left(\frac{-8}{5}\right)^3$

- (i) $(-2)^6$ (ii) $\left(\frac{-8}{5}\right)^6$ (iii) $\left(\frac{-6}{5}\right)^6$ (iv) $\left(\frac{-8}{5}\right)^5$ (v) $\left(\frac{-8}{5}\right)^7$

11. Simplify the expression $\left(\frac{-2}{5}\right)^{-2} \times \left(\frac{-2}{5}\right)^{-2} \times \left(\frac{-2}{5}\right)^{-2}$

- (i) $\left(\frac{-2}{5}\right)^{-3}$ (ii) $\left(\frac{-2}{5}\right)^{-5}$ (iii) $\left(\frac{-4}{5}\right)^{-6}$ (iv) $\left(\frac{-2}{5}\right)^{-7}$ (v) $\left(\frac{-2}{5}\right)^{-6}$

12. Simplify the expression $7^3 \times 7^5$

- (i) 7^9 (ii) 7^8 (iii) 10^8 (iv) 7^7 (v) 4^8

13. Simplify the expression $5^{-5} \times 5^{-3} \times 5^{-6}$

- (i) 7^{-14} (ii) 2^{-14} (iii) 5^{-14} (iv) 5^{-15} (v) 5^{-13}

14. Simplify the expression $(-3)^5 \times (-3)^6 \times (-3)^5$

- (i) $(-3)^{16}$ (ii) $(-5)^{16}$ (iii) $(-3)^{17}$ (iv) $(-3)^{18}$ (v) $(-3)^{15}$

15. Simplify the expression $(-7)^{-6} \times (-7)^{-3}$

- (i) $(-4)^{-9}$ (ii) $(-10)^{-9}$ (iii) $(-7)^{-9}$ (iv) $(-7)^{-8}$ (v) $(-7)^{-10}$

16. Simplify the expression $\left(\frac{9}{7}\right)^2 \times \left(\frac{9}{7}\right)^5 \times \left(\frac{9}{7}\right)^5$

(i) $\left(\frac{9}{7}\right)^{11}$ (ii) $\left(\frac{11}{7}\right)^{12}$ (iii) 1 (iv) $\left(\frac{9}{7}\right)^{13}$ (v) $\left(\frac{9}{7}\right)^{12}$

17. Simplify the expression $\left(\frac{9}{4}\right)^{-5} \times \left(\frac{9}{4}\right)^{-6}$

(i) $\left(\frac{11}{4}\right)^{-11}$ (ii) $\left(\frac{9}{4}\right)^{-11}$ (iii) $\left(\frac{9}{4}\right)^{-12}$ (iv) $\left(\frac{9}{4}\right)^{-10}$ (v) $\left(\frac{7}{4}\right)^{-11}$

18. Simplify the expression $\left(\frac{-8}{9}\right)^7 \times \left(\frac{-8}{9}\right)^6$

(i) $\left(\frac{-8}{9}\right)^{13}$ (ii) $\left(\frac{-10}{9}\right)^{13}$ (iii) $\left(\frac{-8}{9}\right)^{14}$ (iv) $\left(\frac{-2}{3}\right)^{13}$ (v) $\left(\frac{-8}{9}\right)^{12}$

19. Simplify the expression $\left(\frac{-5}{9}\right)^{-9} \times \left(\frac{-5}{9}\right)^{-2}$

(i) $\left(\frac{-7}{9}\right)^{-11}$ (ii) $\left(\frac{-5}{9}\right)^{-12}$ (iii) $\left(\frac{-5}{9}\right)^{-10}$ (iv) $\left(\frac{-1}{3}\right)^{-11}$ (v) $\left(\frac{-5}{9}\right)^{-11}$

Assignment Key

1) (v)	2) (ii)	3) (iv)	4) (v)	5) (v)	6) (v)
7) (i)	8) (v)	9) (iii)	10) (ii)	11) (v)	12) (ii)
13) (iii)	14) (i)	15) (iii)	16) (v)	17) (ii)	18) (i)
19) (v)					