



1.  $(-2 \times 5 \times 7)^2 =$

- (i)  $(-2)^2 \times 5 \times 7$  (ii)  $(-2)^2 \times 2^2 \times 4^2$  (iii)  $(-2)^2 \times 5^3 \times 7^3$  (iv)  $(-2)^2 \times 8^2 \times 9^2$  (v)  $(-2)^2 \times 5^2 \times 7^2$

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

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

3.  $(\frac{9}{2} \times \frac{7}{4} \times \frac{5}{4})^2 =$

- (i)  $(\frac{9}{2})^2 \times \frac{7}{4} \times \frac{5}{4}$  (ii)  $(\frac{9}{2})^2 \times (\frac{7}{4})^3 \times (\frac{5}{4})^3$  (iii)  $(\frac{9}{2})^2 \times (\frac{7}{4})^2 \times (\frac{5}{4})^2$  (iv)  $(\frac{9}{2})^2 \times (\frac{5}{4})^2 \times (\frac{3}{4})^2$

(v)  $(\frac{9}{2})^2 \times (\frac{9}{4})^2 \times (\frac{7}{4})^2$

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

- (i)  $(\frac{-7}{2})^{(8/3)} \times (\frac{3}{2})^{(8/3)}$  (ii)  $(\frac{-7}{2})^{(8/3)} \times (\frac{3}{2})^8$  (iii)  $(\frac{-7}{2})^{(8/3)} \times (\frac{5}{2})^{(8/3)}$  (iv)  $(\frac{-7}{2})^{(8/3)} \times (\frac{1}{2})^{(8/3)}$

(v)  $(\frac{-7}{2})^{(8/3)} \times (\frac{3}{2})^{(8/5)}$

5. Simplify the expression  $3^2 \times 3^2$

- (i)  $3^3$  (ii)  $3^4$  (iii)  $3^5$  (iv)  $3$  (v)  $6^4$

6. Simplify the expression  $7^{-7} \times 7^{-7} \times 7^{-7}$

- (i)  $7^{-20}$  (ii)  $5^{-21}$  (iii)  $10^{-21}$  (iv)  $7^{-21}$  (v)  $7^{-22}$

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

- (i)  $(-7)^{16}$  (ii)  $(-9)^{16}$  (iii)  $(-9)^{17}$  (iv)  $(-11)^{16}$  (v)  $(-9)^{15}$

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

- (i)  $(-7)^{-27}$  (ii)  $(-5)^{-27}$  (iii)  $(-7)^{-28}$  (iv)  $(-10)^{-27}$  (v)  $(-7)^{-26}$

9. Simplify the expression  $7^{-8} \times 7^{-8}$

- (i)  $7^{-15}$  (ii)  $5^{-16}$  (iii)  $7^{-16}$  (iv)  $7^{-17}$  (v)  $9^{-16}$

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

- (i)  $(-3)^9$  (ii)  $(-6)^8$  (iii)  $(-8)^9$  (iv)  $(-6)^{10}$  (v)  $(-6)^9$

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

- (i)  $\left(\frac{-10}{3}\right)^{-10}$  (ii)  $\left(\frac{-8}{3}\right)^{-9}$  (iii)  $\left(\frac{-8}{3}\right)^{-10}$  (iv)  $(-2)^{-10}$  (v)  $\left(\frac{-8}{3}\right)^{-11}$

12. Simplify the expression  $6^7 \times 6^7 \times 6^6$

- (i)  $6^{20}$  (ii)  $6^{19}$  (iii)  $6^{21}$  (iv)  $3^{20}$  (v)  $9^{20}$

13. Simplify the expression  $7^{-7} \times 7^{-2} \times 7^{-6}$

- (i)  $7^{-15}$  (ii)  $5^{-15}$  (iii)  $7^{-14}$  (iv)  $10^{-15}$  (v)  $7^{-16}$

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

- (i)  $(-8)^6$  (ii)  $(-6)^7$  (iii)  $(-6)^6$  (iv)  $(-4)^6$  (v)  $(-6)^5$

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

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

16. Simplify the expression  $\left(\frac{3}{2}\right)^5 \times \left(\frac{3}{2}\right)^3$

- (i)  $\left(\frac{3}{2}\right)^7$  (ii)  $\left(\frac{1}{2}\right)^8$  (iii)  $\left(\frac{3}{2}\right)^8$  (iv)  $\left(\frac{3}{2}\right)^9$  (v)  $\left(\frac{5}{2}\right)^8$

17. Simplify the expression  $\left(\frac{6}{5}\right)^{-5} \times \left(\frac{6}{5}\right)^{-4} \times \left(\frac{6}{5}\right)^{-2}$

(i)  $\left(\frac{6}{5}\right)^{-12}$  (ii)  $\left(\frac{4}{5}\right)^{-11}$  (iii)  $\left(\frac{6}{5}\right)^{-10}$  (iv)  $\left(\frac{8}{5}\right)^{-11}$  (v)  $\left(\frac{6}{5}\right)^{-11}$

18. Simplify the expression  $(-4)^7 \times (-4)^3 \times (-4)^5$

(i)  $(-1)^{15}$  (ii)  $(-4)^{16}$  (iii)  $(-7)^{15}$  (iv)  $(-4)^{15}$  (v)  $(-4)^{14}$

19. Simplify the expression  $\left(\frac{-7}{2}\right)^{-6} \times \left(\frac{-7}{2}\right)^{-5}$

(i)  $\left(\frac{-5}{2}\right)^{-11}$  (ii)  $\left(\frac{-9}{2}\right)^{-11}$  (iii)  $\left(\frac{-7}{2}\right)^{-11}$  (iv)  $\left(\frac{-7}{2}\right)^{-12}$  (v)  $\left(\frac{-7}{2}\right)^{-10}$

## Assignment Key

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