

Key

Division Properties Day 1

SIMPLIFYING EXPRESSIONS Simplify the expression. Write your answer using exponents.

3. $\frac{5^6}{5^2}$

4. $\frac{2^{11}}{2^6}$

5. $\frac{3^9}{3^5}$

6. $\frac{(-6)^8}{(-6)^5}$

7. $\frac{(-4)^7}{(-4)^4}$

8. $\frac{(-12)^9}{(-12)^3}$

9. $\frac{10^5 \cdot 10^5}{10^4}$

10. $\frac{6^7 \cdot 6^4}{6^6}$

11. $\left(\frac{1}{3}\right)^5$

12. $\left(\frac{3}{2}\right)^4$

13. $\left(-\frac{5}{4}\right)^4$

14. $\left(-\frac{2}{5}\right)^5$

15. $7^9 \cdot \frac{1}{7^2}$

16. $\frac{1}{9^5} \cdot 9^{11}$

17. $\left(\frac{1}{3}\right)^4 \cdot 3^{12}$

18. $4^9 \cdot \left(-\frac{1}{4}\right)^5$

③ 5^4

④ 2^5

⑤ 3^4

⑥ $(-6)^3$

⑦ $(-4)^3$

⑧ $(-12)^6$

⑨ $\frac{10^{10}}{10^4} = \boxed{10^6}$

⑩ $\frac{6^{11}}{6^6} = \boxed{6^5}$

⑪ $\frac{1^5}{3^5}$

⑫ $\frac{3^4}{2^4}$

⑬ $\frac{(-5)^4}{4^4}$

⑭ $\frac{(-2)^5}{5^5}$

⑮ 7^7

⑯ $\frac{9^{11}}{9^5} = \boxed{9^6}$

⑰ $\frac{1^4}{3^4} \cdot 3^{12} = \frac{3^{12}}{3^4} = \boxed{3^8}$

⑱ $4^9 \cdot \frac{(-1)^5}{4^5} = \frac{-1 \cdot 4^9}{4^5} = \boxed{-4^4}$