



Use the law of exponents to rewrite each problem.

**Answers**

1)  $6^6 \times 6^9 =$  \_\_\_\_\_

2)  $(\frac{1}{7})^5 =$  \_\_\_\_\_

3)  $4^{-3} =$  \_\_\_\_\_

4)  $8^0 =$  \_\_\_\_\_

5)  $(4^9)^8 =$  \_\_\_\_\_

6)  $6^{-2} =$  \_\_\_\_\_

7)  $5^0 =$  \_\_\_\_\_

8)  $(9 \times 2)^6 =$  \_\_\_\_\_

9)  $(8 \times 4)^8 =$  \_\_\_\_\_

10)  $(\frac{1}{6})^9 =$  \_\_\_\_\_

11)  $(2 \times 3)^2 =$  \_\_\_\_\_

12)  $3^{-8} =$  \_\_\_\_\_

13)  $4^3 \times 4^4 =$  \_\_\_\_\_

14)  $6^1 =$  \_\_\_\_\_

15)  $6^0 =$  \_\_\_\_\_

16)  $6^1 =$  \_\_\_\_\_

17)  $8^1 =$  \_\_\_\_\_

18)  $3^5 \times 3^{-9} =$  \_\_\_\_\_

19)  $2^7 \times 2^{-5} =$  \_\_\_\_\_

20)  $3^3 \times 3^6 =$  \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

14. \_\_\_\_\_

15. \_\_\_\_\_

16. \_\_\_\_\_

17. \_\_\_\_\_

18. \_\_\_\_\_

19. \_\_\_\_\_

20. \_\_\_\_\_



Use the law of exponents to rewrite each problem.

1)  $6^6 \times 6^9 = 6^{15}$

2)  $(\frac{1}{7})^5 = \frac{1}{7^5}$

3)  $4^{-3} = \frac{1}{4^3}$

4)  $8^0 = 1$

5)  $(4^9)^8 = 4^{72}$

6)  $6^{-2} = \frac{1}{6^2}$

7)  $5^0 = 1$

8)  $(9 \times 2)^6 = 9^6 \times 2^6$

9)  $(8 \times 4)^8 = 8^8 \times 4^8$

10)  $(\frac{1}{6})^9 = \frac{1}{6^9}$

11)  $(2 \times 3)^2 = 2^2 \times 3^2$

12)  $3^{-8} = \frac{1}{3^8}$

13)  $4^3 \times 4^4 = 4^7$

14)  $6^1 = 6$

15)  $6^0 = 1$

16)  $6^1 = 6$

17)  $8^1 = 8$

18)  $3^5 \times 3^{-9} = 3^{-4}$

19)  $2^7 \times 2^{-5} = 2^2$

20)  $3^3 \times 3^6 = 3^9$

Answers

1.  $6^{15}$

2.  $\frac{1}{7^5}$

3.  $\frac{1}{4^3}$

4.  $1$

5.  $4^{72}$

6.  $\frac{1}{6^2}$

7.  $1$

8.  $9^6 \times 2^6$

9.  $8^8 \times 4^8$

10.  $\frac{1}{6^9}$

11.  $2^2 \times 3^2$

12.  $\frac{1}{3^8}$

13.  $4^7$

14.  $6$

15.  $1$

16.  $6$

17.  $8$

18.  $3^{-4}$

19.  $2^2$

20.  $3^9$