



Use the law of exponents to rewrite each problem.

1) $2^7 \times 2^8 =$ _____

2) $3^{-9} =$ _____

3) $3^{-7} =$ _____

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

5) $(2^3)^8 =$ _____

6) $6^1 =$ _____

7) $(5^3)^3 =$ _____

8) $(\frac{1}{2})^8 =$ _____

9) $9^1 =$ _____

10) $4^3 \times 4^{-6} =$ _____

11) $(7^3)^2 =$ _____

12) $(3 \times 8)^7 =$ _____

13) $4^8 \times 4^8 =$ _____

14) $6^1 =$ _____

15) $7^0 =$ _____

16) $(7 \times 5)^5 =$ _____

17) $8^3 \times 8^{-8} =$ _____

18) $(8 \times 6)^8 =$ _____

19) $8^0 =$ _____

20) $(\frac{1}{5})^4 =$ _____

Answers

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) $2^7 \times 2^8 = 2^{7+8}$

2) $3^{-9} = \frac{1}{3^9}$

3) $3^{-7} = \frac{1}{3^7}$

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

5) $(2^3)^8 = 2^{3 \times 8}$

6) $6^1 = 6$

7) $(5^3)^3 = 5^{3 \times 3}$

8) $(\frac{1}{2})^8 = \frac{1}{2^8}$

9) $9^1 = 9$

10) $4^3 \times 4^{-6} = 4^{3-6}$

11) $(7^3)^2 = 7^{3 \times 2}$

12) $(3 \times 8)^7 = 3^7 \times 8^7$

13) $4^8 \times 4^8 = 4^{8+8}$

14) $6^1 = 6$

15) $7^0 = 1$

16) $(7 \times 5)^5 = 7^5 \times 5^5$

17) $8^3 \times 8^{-8} = 8^{3-8}$

18) $(8 \times 6)^8 = 8^8 \times 6^8$

19) $8^0 = 1$

20) $(\frac{1}{5})^4 = \frac{1}{5^4}$

Answers

1. 2^{7+8}

2. $\frac{1}{3^9}$

3. $\frac{1}{3^7}$

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

5. $2^{3 \times 8}$

6. 6

7. $5^{3 \times 3}$

8. $\frac{1}{2^8}$

9. 9

10. 4^{3-6}

11. $7^{3 \times 2}$

12. $3^7 \times 8^7$

13. 4^{8+8}

14. 6

15. 1

16. $7^5 \times 5^5$

17. 8^{3-8}

18. $8^8 \times 6^8$

19. 1

20. $\frac{1}{5^4}$

20. $\frac{1}{5^4}$