

Name: _____

Date: _____

Product, quotient and power rules

Write each answer as one power. Add, subtract or multiply the exponents.

1. $5^2 \times 5^4 = 5^?$ _____

11. $m^5 \times m^3 = m^?$ _____

2. $5^7 \div 5^5 = 5^?$ _____

12. $(5^3)^3 = 5^?$ _____

3. $x^3 \div x^2 = x^?$ _____

13. $x^3 \times x^5 = x^?$ _____

4. $(5^3)^2 = 5^?$ _____

14. $5^{10} \div 5^5 = 5^?$ _____

5. $10^4 \times 10^4 = 10^?$ _____

15. $x^2 \times x^2 = x^?$ _____

6. $(3^2)^2 = 3^?$ _____

16. $(n^3)^3 = n^?$ _____

7. $m^6 \div m^3 = m^?$ _____

17. $x^9 \div x^5 = x^?$ _____

8. $n^7 \div n^2 = n^?$ _____

18. $x^9 \div x^4 = x^?$ _____

9. $10^6 \times 10^5 = 10^?$ _____

19. $(m^3)^4 = m^?$ _____

10. $2^7 \times 2^3 = 2^?$ _____

20. $10^{10} \div 10^5 = 10^?$ _____

Exponents and Scientific Notation: Answer Key

1. 5^6

2. 5^2

3. x^1

4. 5^6

5. 10^8

6. 3^4

7. m^3

8. n^5

9. 10^{11}

10. 2^{10}

11. m^8

12. 5^9

13. x^8

14. 5^5

15. x^4

16. n^9

17. x^4

18. x^5

19. m^{12}

20. 10^5