

8 Math Review for Unit 3 Test

Find the product or quotient. Write your answer using exponents.

1. $10^{10} * 10^5$

2. $x^4 * x^8$

3. $\frac{8x^4}{2x^3}$

Find the product or quotient. Use only positive exponents.

4. $7^{-9} * 7^{-8}$

5. $\frac{20x^{-3}}{5x^{-8}}$

Write the number in standard form.

6. 5.81×10^{-3}

7. 3.86×10^5

Write the number in scientific notation.

8. 123400,000,000

9. 0.0003579

Raise the power to a power. Write using only positive exponents.

10. $(x^6)^5$

11. $(a^2)^{-3}$

Find the missing exponent.

12. $x^7 * x^? = x^4$

13. $a^3 * a^9 = a^?$

8 Math Review for Unit 3 Test

Answers

Find the product or quotient. Write your answer using exponents.

1. $10^{10} * 10^5 = 10^{15}$

2. $x^4 * x^8 = x^{12}$

3. $\frac{8x^4}{2x^3} = 4x$

Find the product or quotient. Use only positive exponents.

4. $7^{-9} * 7^{-8} = 7^{-17} = \frac{1}{7^{17}}$

5. $\frac{20x^{-3}}{5x^{-8}} = 4x^5$

Write the number in standard form.

6. $5.81 \times 10^{-3} = 0.00581$

7. $3.86 \times 10^5 = 386,000$

Write the number in scientific notation.

8. $123400000000 = 1.234 \times 10^{11}$

9. $0.0003579 = 3.579 \times 10^{-4}$

Raise the power to a power. Write using only positive exponents.

10. $(x^6)^5 = x^{30}$

11. $(a^2)^{-3} = a^{-6} = \frac{1}{a^6}$

Find the missing exponent.

12. $x^7 * x^? = x^{-4}$

-11

13. $a^3 * a^? = a^{12}$

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