

Scientific Notation Worksheet

Simplify

- 3^{-3}
- $8^3 \times 8^{-2}$
- $6^9 \div 6^3$
- $(3^2)^0$
- $(\frac{1}{2})^{-4} (2a^3)^3 (4a)^{-2}$
- $(-3x^8y^3z^{-4})^4 \div (4x^2y^{-4}z^{-2})^2$
- $(2.28 \times 10^6) + (5.3 \times 10^5)$
- $(6.4 \times 10^3) + (6.5 \times 10^4)$
- $(4.8 \times 10^4) \div (6.4 \times 10^2)$
- $(9.31 \times 10^5) - (4.2 \times 10^5)$
- $(5.41 \times 10^{-3}) - (8.1 \times 10^{-4})$
- $(2.3 \times 10^4) (5.6 \times 10^3)$
- $(4.7 \times 10^9) (1.3 \times 10^{-3})$

Convert to scientific notation

- Two hundred twenty-one thousand

Word Problems

- The population of Asia is 4.05×10^9 . The population of Europe is 7.36×10^8 . What is the total population of both Asia and Europe?
- The half-life of uranium -238 is 4.5×10^9 years. The half-life of uranium -234 is 2.5×10^5 years. How many times greater is the half-life of uranium-238 than that of uranium-234?
- The state of Colorado covers about 1.04×10^5 square miles. The Indian Ocean covers about 2.808×10^7 square miles. How many times bigger than Colorado is the Indian Ocean?
- One factory produces 28,000 tires a month. A second factory produces 3.6×10^3 tires per month. How many do both factories produce in a month?
- The planet Groovix is 4.5×10^{12} light years away from Earth. The planet Funkybus is 2.3×10^{11} light years from Earth. How much further away is Groovix than Funkybus?