

(Negative exponent and Scientific notation)

1. Write the following in standard form;

a. 4^3 Answer:

b. 3^4 Answer:

c. 2^{-4} Answer:

2. Which of the following is not equal to 10^{-2} ?

a. 0.01

b. $\frac{1}{10^2}$

c. $\frac{1}{10^{-2}}$

d. $\frac{1}{100}$

3 Write the exponential form given below in both standard and expanded form;

$$3 \times 10^3 + 5 \times 10^1 + 2 \times 10^{-2} + 7 \times 10^{-5}$$

Expanded form:

Standard form:

4 Write the following numbers in scientific notation; (use ^ to show exponent:

Example *Write 10^3 as 10^3*)

a. 45768 Answer:

b. 2,340,500,000 Answer:

c. 0.000,079 Answer:

5 Write the following scientific notations in standard form;

a. 2.35×10^5 Answer:

b. 2.35×10^{-4} Answer:

6 The distance from Earth to sun is 1.4849×10^8 km. The distance from Earth to Neptune is about 4.3694×10^9 km.

a. Which is further from Earth, Sun or Neptune?

Answer:

b. By how many km more, is the Sun or Neptune from the Earth?

Answer:

7 The average mass of an ant is about 4×10^{-3} gram. And the average mass of a worker bee is about 0.11 gram.

a. Which animal weighs more, an ant or worker bees?

Answer:

b. By how much more?

Answer: