

Indicators

Objective:

1.06 Use exponential, scientific, and calculator notation to write very large and very small numbers.

Vocabulary and Resources		
place value standard form	powers of ten exponent	base

A. The population of a certain country has reached 4.29×10^8 . Which of the following is another way to represent the population?

- A 429 million
- B 4.29 million
- C 4.29 billion
- D 429 billion

B. The Diplococus dinosaur is believed to have become extinct approximately 1.38×10^8 years ago, The Oviraptor is believed to have become extinct approximately 7×10^7 years ago. About how many years were there between the extinctions of these two dinosaur types?

C. The figure below shows the display on a scientific calculator. The value of the displayed number is between which of the following pairs of numbers?

4.752	E -02
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- a) 0.04 and 0.05
- b) 0.4 and 0.5
- c) 4.0 and 5.0
- d) 40.0 and 50.0
- e) 400.0 and 500.0

(From SREB publication *Getting Students Ready for Algebra I: What Middle Grades Students Need to Know and Be Able to Do*)

D. Write the following numbers in scientific notation:

a) 2,379,000

b) 0.0000000005

c) 8,000,000,000

d) 0.0000786

e) 489,500,000,000

f) 0.00000206