

**10.6**

**Writing**

**Scientific Notation**

# Scientific Notation

A number is expressed in scientific notation when it is in the form

$$a \times 10^n$$

where **a** is between 1 and 10 and **n** is an integer

# Scientific Notation

This is way of writing very big or small numbers in an easier way.

150,000,000

# Scientific Notation

This is way of writing very big or small numbers in an easier way.

0.0000625

# Scientific Notation

Write the following in scientific notation:

1) 64,830,000,000,000

2) 0.00000000089

3) 118,000,000,000,000

4) 0.0000000000000025

5) 67

**6) A large corporation purchased a video-sharing website for \$1,650,000,000. Write this number in scientific notation.**

**7) The 2004 Indonesian earthquake slowed the rotation of Earth, making the length of a day 0.00000268 second shorter. Write this number in scientific notation.**

8)



An album receives an award when it sells 10,000,000 copies.

An album has sold 8,780,000 copies. How many more copies does it need to sell to receive the award?

- (A)  $1.22 \times 10^{-7}$                       (B)  $1.22 \times 10^{-6}$   
(C)  $1.22 \times 10^6$                       (D)  $1.22 \times 10^7$



- 9) The table shows when the last three geologic eras began. Order the eras from earliest to most recent.



Era	Began
Paleozoic	$5.42 \times 10^8$ years ago
Cenozoic	$6.55 \times 10^7$ years ago
Mesozoic	$2.51 \times 10^8$ years ago