

- 1 Which of the following shows  $3 \times 3 \times 3 \times 3$  written in exponential notation?

A  $3^4$   
B 81  
C 12  
D  $4^3$

- 2 What would be the value of the *seventh* term if the following pattern continues?

$$10^1 = 10$$

$$10^2 = 100$$

$$10^3 = 1,000$$

$$10^4 = 10,000$$

- A 1,000,000  
B 100,000,000  
C 10,000,000  
D 100,000
- 3 Which of the following is NOT equivalent to four cubed?
- A  $4^3$   
B  $4 \times 3$   
C  $4 \times 4 \times 4$   
D 64

4 Look at the table.

	Fraction Form	Decimal Form
A	$\frac{1}{10^{-6}}$	0.000001
B	$\frac{1}{10^{-5}}$	0.000001
C	$\frac{1}{10^6}$	0.0000001
D	$\frac{1}{10^5}$	0.00001

Which row in the table illustrates an equivalent fraction and decimal form?

- A Row D
- B Row A
- C Row C
- D Row B

5 Which is NOT equivalent to  $10^{-4}$ ?

- A  $\frac{1}{10,000}$
- B  $\frac{1}{10^4}$
- C  $\frac{1}{1000}$
- D 0.0001

6 Click on the box to choose the number or expression. You must select all correct examples.

Select all answers that are equivalent to  $10^{-3}$

<input type="checkbox"/> 0.0001
<input type="checkbox"/> $\frac{1}{100}$
<input type="checkbox"/> 0.001
<input type="checkbox"/> $\frac{1}{1,000}$

7 Fill in the blank with the correct number.

What number must  $x$  be replaced with to result in the answer of 1?

$x =$

$10^x$

8 Click and drag each selected number to the correct box.

Using the pattern in the table, find the equivalent decimal.

Power of 10	Standard Form
$10^{-6}$	0.000001
$10^{-5}$	
$10^{-4}$	0.0001
$10^{-3}$	0.001
$10^{-2}$	
$10^{-1}$	0.1
$10^0$	
$10^1$	

9 Directions: Type your answer in the box.

What value of  $x$  makes the statement true?

$$\left(\frac{1}{10}\right) \cdot \left(\frac{1}{10}\right) \cdot \left(\frac{1}{10}\right) \cdot \left(\frac{1}{10}\right) \cdot \left(\frac{1}{10}\right) = 10^x$$

$x =$

10 Which is equivalent to  $10^{-2}$ ?

A  $\frac{1}{100}$

B 100

C  $\frac{1}{10}$

D 0.001