

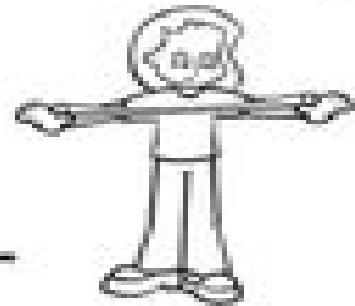
Name: \_\_\_\_\_

Date: \_\_\_\_\_

A **power** is the product of multiplying a number by itself. It is represented as a **base number** and an **exponent**. The **base number** indicates what number is being multiplied, and the **exponent** indicates how many times the base number is to be multiplied.

$$10^5 = 10 \times 10 \times 10 \times 10 \times 10 = 100,000$$

↖ exponent  
↘ factors



Write the factors, then find the value.

A.  $5^2 =$                        $7^2 =$                        $9^2 =$                        $3^3 =$                        $2^4 =$   
 $5 \times 5 = 25$

B.  $10^2 =$                        $10^3 =$                        $5^3 =$                        $6^2 =$                        $3^5 =$

Write the value.

C.  $2^3 = 8$                        $4^2 =$                        $4^3 =$                        $2^4 =$                        $5^2 =$

D.  $8^2 =$                        $3^4 =$                        $2^5 =$                        $3^3 =$                        $8^3 =$

Write the value using exponents.

E.  $5 \times 5 \times 5 \times 5 \times 5 =$                        $10 \times 10 \times 10 \times 10 =$                        $6 \times 6 \times 6 \times 6 =$                        $2 \times 2 =$   
 F.  $4 \times 4 \times 4 \times 4 =$                        $7 \times 7 \times 7 =$                        $2 \times 2 \times 2 \times 2 \times 2 =$                        $3 \times 3 \times 3 =$   
 G.  $10 \times 10 \times 10 =$                        $5 \times 5 =$                        $8 \times 8 \times 8 =$                        $10 \times 10 =$

Fill in the missing numbers.

	Product	Number to Given Power	Standard Notation
H.	$8 \times 8 \times 8$	$8^{\quad}$	512
I.	$5 \times 5$		
J.	$13 \times 13 \times 13$		
K.	$2 \times 2 \times 2 \times 2 \times 2$		