Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Math: Intro to Exponents

*Directions: Fill in the blanks below as you watch the video.*

Powers and Exponents

Exponents are used to represent \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - multiplying the same \_\_\_\_\_\_\_\_\_ (number) over and over again.

|  |  |  |
| --- | --- | --- |
| \_\_\_\_\_\_\_\_ -  The number being multiplied repeatedly |  | \_\_\_\_\_\_\_\_\_\_\_\_\_ -  How many times the base is being multiplied by itself |

Write each product using an exponent. Then find its value.

1. 4 x 4 x 4 x 4 x 4 =

Exponential form: \_\_\_\_\_\_\_\_\_\_\_

Value: \_\_\_\_\_\_\_

1. 1 x 1 x 1 x 1 x 1 x 1 x 1 x 1 =

Exponential form: \_\_\_\_\_\_\_\_\_\_\_

Value: \_\_\_\_\_\_\_

1. 6 x 6 x 6 =

Exponential form: \_\_\_\_\_\_\_\_\_\_\_

Value: \_\_\_\_\_\_\_

You Try!

4. 5 x 5 x 5 x 5 =

Exponential form: \_\_\_\_\_\_\_\_\_\_\_

Value: \_\_\_\_\_\_\_

5. 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 =

Exponential form: \_\_\_\_\_\_\_\_\_\_\_

Value: \_\_\_\_\_\_\_

6. 7 x 7 =

Exponential form: \_\_\_\_\_\_\_\_\_\_\_

Value: \_\_\_\_\_\_\_

There are some common phrases that are used to name certain exponents..

7. Four “squared” = \_\_\_\_\_\_\_

8. Eight “cubed” = \_\_\_\_\_\_\_

Complete the missing sections in each row.

|  |  |  |
| --- | --- | --- |
| Exponential Form | Expanded Form | Value |
| 4 ^ 3 |  |  |
|  | 3 x 3 x 3 x 3 |  |
|  |  | 100 |
|  | 5 x 5 x 5 |  |
| 2 ^ 7 |  |  |