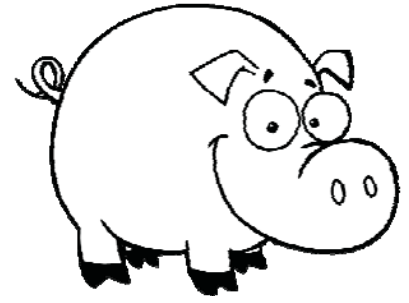


Comparing Exponents Step-by-Step Lesson

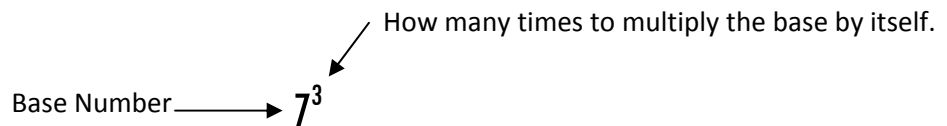


Compare the following values using the $>$, $<$, or $=$ symbols.

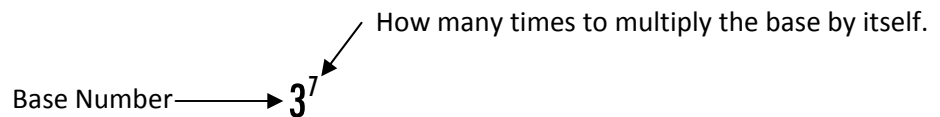
$$7^3 \quad \underline{\hspace{1cm}} \quad 3^7$$

Explanation:

Step 1: Determine the value of each side.



This tell us that we multiply 7 by itself 3 times or $7 \times 7 \times 7$.



This tell us that we multiply 3 by itself 7 times or $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$.

As it stands now we are comparing: $7 \times 7 \times 7$ to $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$.

Find the products of each side:

$$7 \times 7 \times 7 = 343$$

$$3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 = 2,187$$

Step 2: Compare the values using symbols. We can see that the left side is much **less than** the right side or

$$7^3 < 3^7$$
$$343 \qquad 2,187$$

