

Date: _____

Introduction to Exponents: What Do We Remember, and How Can We Extend What We Know?

We have already worked with exponents in this course while we were doing BEDMAS. Let's summarize what we know in preparation for our unit on exponents and algebra.

1) What does an exponent represent?



2) What is a number raised to an exponent called? Label the components of the expression below.

$$a^c$$

3) What does it mean to "write a power in expanded form"? Try it with $(-4)^5$

4) How would we write $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$ as a power?

5) What do we do when our base is a fraction? Write $\left(-\frac{3}{4}\right)^3$ in expanded form, then evaluate.

6) Try $\left(-\frac{3}{4}\right)^2$ and $\left(-\frac{3}{4}\right)^4$. What do you think that we can conclude about the sign of our answer from our exponent?

7) What does $(2x)^3$ look like in expanded form? What do you think that we do to complete this multiplication? Do variables change the rules of math at all?

Try writing $(-3x)^5$ in expanded form. What sign do you expect your answer to have? Why? Evaluate.

