

# Review for the quiz

---

<http://theprofessort.com/review-for-the-quiz/>

## Lesson 1: 0 and negative exponents

Two most important things to remember are:

- $x^0 = 1$
- $x^{-a} = 1/x^a$

We also learned these things:

- $1/1/x = x$
- When in doubt, write it out.

## Lesson 2: Scientific Notation

- $a \cdot 10^n$  where **a is equal to or larger than 1 and smaller than 10**. n is an integer.
- To convert from scientific notation to normal notation, move the comma exponent times to the right  $2 \cdot 10^4 = 20000$  i.e. add 4 zeroes in this case.
- If you have negative power, move the comma to the left, not right. You end up with a very small number.  $2 \cdot 10^{-4} = 0.0002$
- Check your conversion by moving the period.
- If you want to convert a normal notation number into scientific notation, determine “a” (it can have digits after the period), and move the dot to the right side of “a”. Exponents equals to how many times you transfer the

## Lesson 3: Multiplying exponents with the same base

- **One you must know:  $a^m \cdot a^n = a^{(m+n)}$**
- Remember to multiply coefficients