Lesson 3-2 Exponents (continued)

SWBAT: Use exponents and simplify expressions with exponents.

Special Exponents:

Base 10 –

- If the base of the exponent is a 10, just write a 1 and the exponent will tell you how many _____.

Ex: : 10^4 = 10,000 - The exponent is 4 and I have 4 zeros in my answer.

10^7 = 10^{15}=

Exponent of 1-

- Any number with to the power of 1 is _____.

Ex: 25^1 = 25

8^1 = 87638746^1 =

Power of 0-

- Any number to the power of 0 _____

2^0

2^1

2^2

2^3

Base of 1-

- If you have a base of 1, it doesn't matter what the exponent is, the answer_____

Negative Bases-

- Ignore the negative sign and just do the math
- If the exponent is an odd number, the answer is_____
- If the exponent is an even number, the answer is _____

Ex: $(-2)^3$ = $(-3)^4$ = $(-5)^3$ =

Simplify each expression:

① 10^9 ② 62^1 ③ 12^0 ④ $(-3)^2$

⑤ $(-2)^5$ ⑥ $(-4)^3$ ⑦ $(-6)^0$