Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_ Number: \_\_\_\_\_\_\_\_\_

## 2.1d Notes – Exponents and Parentheses

Throwin’ another one at ya! What do you think?

|  |  |
| --- | --- |
| $$\left(4^{3}\right)^{4}$$ | Thoughts??? |

WHAT DOES IT MEAN??­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write down what these mean, and then write the answer. Then see if we can come up with a pattern:

|  |  |  |
| --- | --- | --- |
| **Question** | **What does it mean?** | **Answer** |
| $$\left(x^{2}\right)^{5}$$ |  |  |
| $$\left(w^{5}\right)^{3}$$ |  |  |
| $$\left(y^{7}\right)^{4}$$ |  |  |
| $$\left(2^{5}\right)^{2}$$ |  |  |
| $$\left(b^{-3}\right)^{3}$$ |  |  |
| $$\left(2^{3}x^{2}\right)^{4}$$ |  |  |

|  |
| --- |
| **Power of a Power Rule:** |

What are the 5 steps now to solving problems with exponents?

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Do these two examples with your teacher. Then try the last one (with other peeps if you want) and show it to your teacher. CIRCLE YOUR ANSWERS!!

Ex #1:



Ex #2:



Ex #3:

