

Warm-Up

Nora takes 2 hours to read 400 pages. Claire takes 3 hours to read 450 pages. Working together, how long should it take them to read 2000 pages?

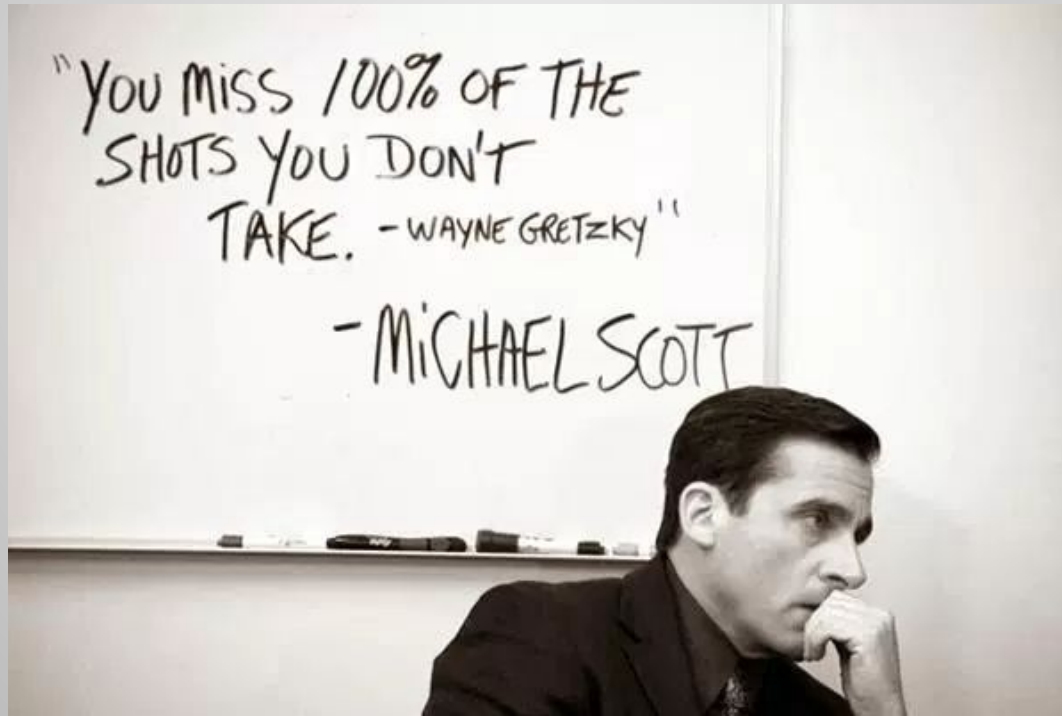


Announcements

- January 28-30th Ms. Barger will be at FETC
- You will start reading Hidden Figures on Monday
- Math NC Check in on February 6th
- Some students need to take yesterday's quiz
 - Block 1 - Alan M.
 - Block 3 - Jackson E., Sydney K., Petr L., Matthew M., Alliyah T.
 - Block 4 - Ian G., Sophia H., Jacob R., Tyler W.

Link to the informal assessment

<http://bit.ly/2sFbePk>



Unit 10 Map - Exponents

Today → Exponential Form and Simplifying Powers & Evaluating Expressions

Monday-Wednesday → Ms. Barger at FETC in Orlando

Thursday → Word Problems Relooped (Friday's HW and classwork from Mon-Wed due)

Friday → Zero and Negative Exponents

Monday → Multiplying and Dividing Powers & Power to a Power

Tuesday → Exponents Review Day (ELA NC Check-Ins)

Wednesday → Exponents Test (Math NC Check-Ins)

Exponential Form and Simplifying Powers & Evaluating Expressions

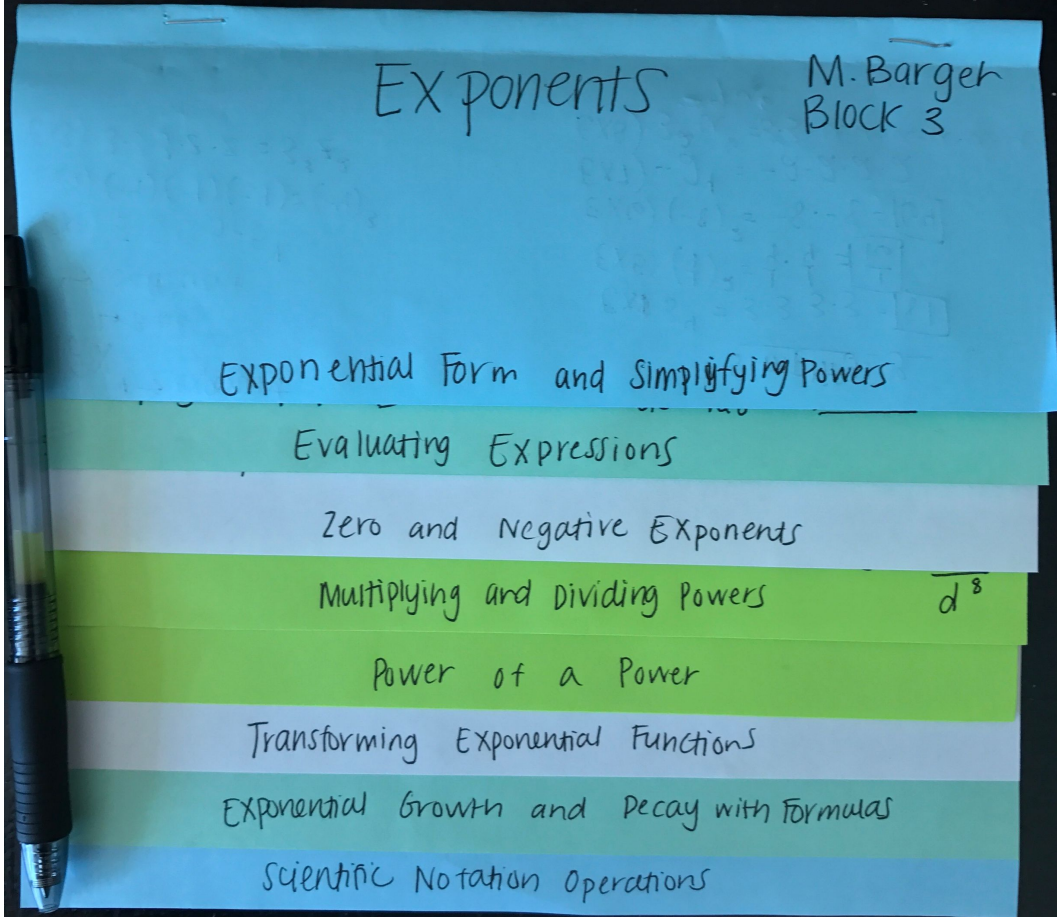
1/25/2019

Create our Exponents Foldable

This foldable will be used for this ENTIRE UNIT and also for the next unit!!

Please do not lose this!

Make sure your name is on it!



Exponential Form and Simplifying Powers



Exponential Form and Simplifying Powers

$12x^4$ → exponent

↳ Base

↳ coefficient

$$\text{EX1) } 5 \cdot 5 \cdot 5 \cdot 5 = 5^4$$

$$\text{EX2) } (-4)(-4)(-4) = (-4)^3$$

$$\text{EX3) } 3 \cdot 3 \cdot 3 \cdot z \cdot z = 3^3 z^2$$

Simplifying

$$\text{EX4) } 3^4 = 3 \cdot 3 \cdot 3 \cdot 3 = \boxed{81}$$

$$\text{EX5) } \left(\frac{1}{4}\right)^2 = \frac{1}{4} \cdot \frac{1}{4} = \boxed{\frac{1}{16}}$$

$$\text{EX6) } (-8)^2 = -8 \cdot -8 = \boxed{64}$$

$$\text{EX7) } -2^4 = -2 \cdot 2 \cdot 2 \cdot 2$$

$$\begin{aligned} \text{EX8) } 3^2 u^6 &= 3 \cdot 3 \cdot u \cdot u \cdot u \cdot u \cdot u \cdot u \\ &= 9u^6 \end{aligned}$$

Evaluating Expressions



Evaluating Expressions

Step 1: Plug in all given values using parentheses
Step 2: Simplify using order of operations

EX 1) find b^a , for $b = -7$

$$(-7)^2$$

$$-7 \cdot -7 = \boxed{49}$$

EX 2) $x \div y^z$ for $x = 9$, $y = 3$, $z = 2$

$$9 \div 3^2 \rightarrow 9 \div 9 \rightarrow \boxed{1}$$

EX 3) $x - y(z \cdot y^z)$

$$x = 20, y = 4, z = 2$$

$$20 - 4(2 \cdot 4^2)$$

$$20 - 4(2 \cdot 16)$$

$$20 - 4(32)$$

$$20 - 128 = \boxed{-108}$$

Evaluating Expressions

Student Created Problems

Students will create their own practice problems and trade them with other groups to complete the practice problems.

Student Interest Survey

<http://bit.ly/StudentInterestUVA>

Homework

Complete the student interest survey. Exponential Worksheet posted online