LESSON PLAN

Lesson #: 7 **Unit#: 0**

Warmup: **Kindly Complete this FORM**

Attendance: **Your attention is appreciated!!!**

News: **See JHS Home Page**

Applications: **When am I ever going to use this stuff?**
Ford Mechanic Training Program
Hendrick Center for Automotive Excellence

Goals: **Complete Both Equations worksheets**
Review Rules for Exponents (& why they work)
Does Math Solve Another Problem?

Exponent Rules/Laws

cuemath
THE MATH EXPERT

Product Rule	$a^m \times a^n = a^{m+n}$
Quotient Rule	$a^m \div a^n = a^{m-n}$
Power of a Power Rule	$(a^m)^n = a^{mn}$
Power of a Product Rule	$(ab)^m = a^m b^m$
Power of a Quotient Rule	$\left(\frac{a}{b}\right)^m = \frac{a^m}{b^m}$
Zero Exponent Rule	$a^0 = 1$
Negative Exponent Rule	$a^{-m} = \frac{1}{a^m}$
Fractional Exponent Rule	$a^{\frac{m}{n}} = \sqrt[n]{a^m}$

Classwork: **Exponent Worksheet (Do Prime-Numbered)**

Problem Solver: **The Boston Marathon started in 1897 (I missed that one). The record time of 2 hrs and 3 mins was set in 2011 by Geoffrey Mutai**

Boston Marathon

Your instructor ran in 1978 with a time of 4 hours and 13 minutes and in 1983 with an improved time of 3 hours and 46 minutes.

1. **Calculate your instructor's rate of improvement (1 point)**
2. **With the results of your calculation above, determine what year your instructor would be breaking the record. (1 points)**
3. **Comment on the problem description and details.**
    1. **Do you see any issues with the problem? (1 point)**
    2. **What do you think is the purpose of this problem? (1 point)**

Questions: **Your Turn!!!**

Bell: **Have a nice day!!!**