January 5th 2015

Due Today: Winter Break Packet -BtB 5
Due Next Class: HW 6.1

Unit 6: Exponents and Radicals

Lesson: 6.1: Review of Exponent Laws

Get Ready: Get out your BtB 5, your winter break packet and the notes from the videos.

Simplify. Your answer should contain only positive exponents.

1) $3b^4 \cdot 2b^3$

2) $\frac{4m^9}{2m^4}$

3) $(2n^4)^3$

4) $3t^3 \cdot 2t^0$

5) $-3b^{-4}$

6) $4x^2y^4 \cdot 4x^3y^{-8}$

Get Ready Review

1) $3b^4 \cdot 2b^3$

$6b^7$

2) $\frac{4m^9}{2m^4}$ $2m^5$

$2 \cdot 2 \cdot 2$

3) $(2n^4)^3$ $2^{1\cdot 3}$

$8n^{12}$

$2^3 \cdot (n^4)^3$

$2^3 \cdot n^{(4\cdot 3)}$

$2 \cdot n \cdot n \cdot n \cdot n$

4) $3t^3 \cdot 2t^0$

$3t^3 \cdot 2(1)$

$6t^3$

5) $-3b^{-4}$

6) $4x^2y^4 \cdot 4x^3y^{-8}$

EXPONENT LAWS

Multiplication

$$(x^a)\cdot(x^b) = x^{a+b}$$

Power of a Power

$$(x^a)^b = x^{ab}$$

Division

$$\frac{x^a}{x^b} = x^{a-b}$$

Zero

$$x^0 = 1$$

Negative

$$x^{-a} = \frac{1}{x^a}$$

$(2x^4)^3$ $\quad$ $2(x^4)^3$

$8(x^{4\cdot 3})$ $\quad$ $2x^{12}$

Please Make Delicious Ziti Now

Power
Multiplication
Division
Zero
Negative

PMDZN

Check exponent packet using keys at your table.

Ask your group members to help with questions that you got wrong.

37) $\frac{16x}{5}$

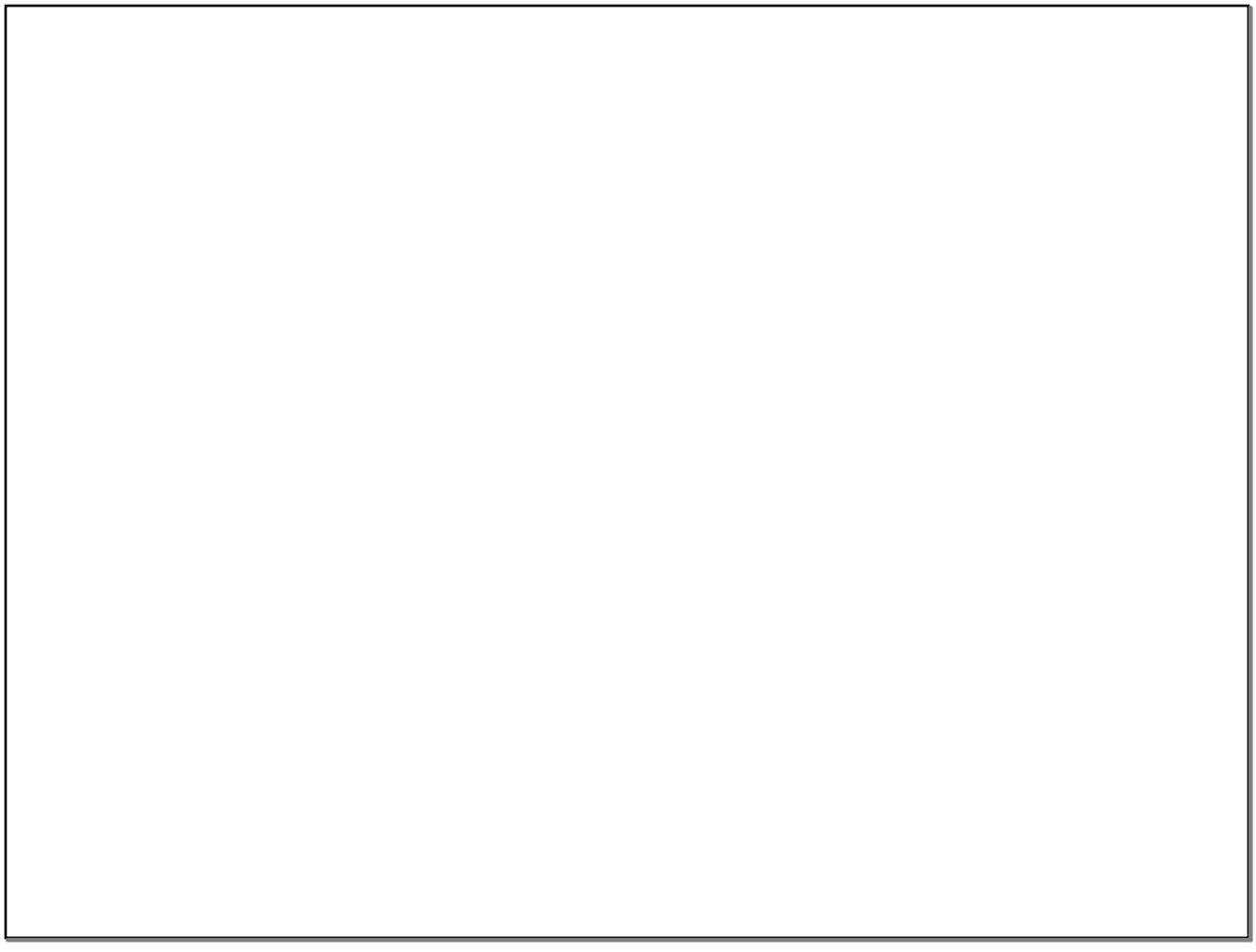
Each group should choose 1 question they want to see done as a class: something that you don't understand, or something you do understand but was confusing at first.

10) $(x^4)^4$

$x^{4 \cdot 4} = x^{16}$

40) $\dfrac{(2n^4)^3}{2n^5 \cdot (n^4)^5} = \dfrac{8n^{12}}{2n^5 \cdot n^{20}} = \dfrac{8n^{12}}{2n^{25}}$

$= 4n^{(12-25)} = 4n^{-13} = \boxed{\dfrac{4}{n^{13}}}$



Quiz

Beat the Basics 5

Make Up Mastery!

HW 6.1

Recap

Homework:

Today in MATH

Next Class: