8.1 Multiplying Exponents Warm-Up

From the set of problems below, complete as many as you can. Of the ones you pick, you can pick 2 problems that you are very confident with and 2 that you want to see more for practice.

1) $b^4 b^3$

2) $8a^2 \cdot 6a^2 \cdot 7a^3$

3) $2v^3 \cdot 6v^2$

4) $2k \cdot 4k$

5) $7n^4 \cdot 7n^3$

6) $\left(x^3\right)^3$

7) $\left(3p^2\right)^3$

8) $\left(8v^2\right)^4$

9) $(3n)^2$

10) $\left(4xx^2\right)^2$

11) $\left(4r^4 \cdot 3r^4\right)^2$

12) $2n^2 \cdot \left(2n^2\right)^3$

13) $\left(2m^4 \cdot m\right)^3$

14) $4b^{-2} \cdot b^2$

15) $n^2 \cdot 3n^{-2}$

Name:_____   Date:_____

Warm-Up Quiz Self-Assess

Q	#	___/5	Reason
1.			
2.			
3.			
4.			
5.			

Your Total Score:____/25

1. What exponent concepts are you struggling with?

2. Which exponent concepts are you feeling comfortable with?

3. How do you think you can improve with working on exponents?

Name: ████████████████   Date: 2/22/13

Warm-Up Quiz Self-Assess

Q	#	___/5	Reason
1.	2	5	all I had to was multiply 2 + 5, & add the exponents I got it right
2.	3	5	I followed through the same proccess as the I got it right previous problem
3.	8	5	all I had to do was carry the exponent
4.	9	0	I didn't understand what to do, I need help with negative exponents, & division with exponents
5.	13	5	easy to understand & comprehend

Your Total Score:_____/25

1. What exponent rules are you struggling with?

Quient of power prop, & Negative Exponents

2. Which exponent rules are you feeling comfortable with?

every thing else

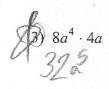3. How do you think you can improve with working on exponents?

reviewing notes, asking questions
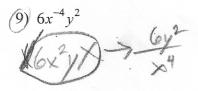
Warm-Up

Date_____ Period____

From the set of problems below pick 5 to complete. 2 of the problems can be ones that you feel very confident with, but you need to pick 3 problems between numbers 5-14.

1) $3r^3 \cdot 6r^3 \cdot 4r^2$

2) $5k^3 \cdot 2k^2$

$10k^5$

3) $8a^4 \cdot 4a$

$32a^5$

4) $\dfrac{6n^4}{3n^3}$

5) $\dfrac{5x}{3x^4}$

6) $\dfrac{6x^2y^2}{2x^4y^3}$

7) $\dfrac{3nm^4}{6m^4n^3}$

8) $\left(8x^4\right)^2$

$64x^8$

9) $6x^{-4}y^2$

$\left(6x^2y\right) \rightarrow \dfrac{6y^2}{x^4}$

10) $\left(\dfrac{2n^2 \cdot 4n^3}{n^3}\right)^4$

11) $\dfrac{7n^{-3}}{n^4}$

12) $\dfrac{3x^0}{5x^2 \cdot x^4}$

13) $\left(n^3\right)^2 n^2 \cdot 4n$

$n^8 \cdot 4n = 4n^9$

14) $\left(\dfrac{4m^4}{m^{-2} \cdot 4m^3}\right)^3$

15) $\left(\dfrac{2r^2}{r^2 \cdot 4r^{-4}}\right)^3$

Name: ███████████ Date: 2-22-13

Warm-Up Quiz Self-Assess

Q	#	___/5	Reason
1.	1	5	multipled the numbers and added the exponets
2.	4	5	divided 6 by 3 and subtracted the exponets
3.	5	5	subtracted the exponets and left the fraction because it could not be simplified any more.
4.	8	5	distributed the exponet and simplified my answer
5.	13	5	distributed the exponet, then combined like terms and simplified my answer.

Your Total Score: 25 /25

1. What exponent rules are you struggling with?

distributing positive exponets to negatives exponets.

2. Which exponent rules are you feeling comfortable with?

adding, multiplying (some) division, subtraction, zeros, and some negatives

3. How do you think you can improve with working on exponents?

practice those skills more, and getting another explenation on how to do it.
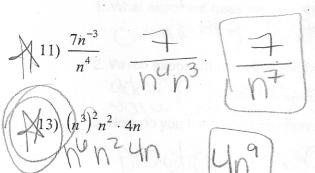
Warm-Up

Name ████████████

Date 2-22-13   Period 6

From the set of problems below pick 5 to complete. 2 of the problems can be ones that you feel very confident with, but you need to pick 3 problems between numbers 5-14.

1) $3r^3 \cdot 6r^3 \cdot 4r^2$

$3 \cdot 6 \cdot 4$
$3+3+2$

$72r^8$

2) $5k^3 \cdot 2k^2$

$10k^5$

3) $8a^4 \cdot 4a$

$32a^5$

4) $\dfrac{6n^4}{3n^3}$ $\dfrac{2n^4}{n^3}$ $2n^1$

5) $\dfrac{5x}{3x^4}$ $\dfrac{5x^1}{3x^4}$ $\dfrac{5}{3x^3}$

6) $\dfrac{6x^2y^2}{2x^4y^3}$

7) $\dfrac{3nm^4}{6m^4n^3}$ $\dfrac{1}{2n^2}$

8) $\left(8x^4\right)^2$ $64x^8$

9) $6x^{-4}y^2$ $\dfrac{6y^2}{x^4}$

10) $\left(\dfrac{2n^2 \cdot 4n^3}{n^3}\right)^4$ $4096n^8$

11) $\dfrac{7n^{-3}}{n^4}$ $\dfrac{7}{n^4n^3}$ $\dfrac{7}{n^7}$

12) $\dfrac{3x^0}{5x^2 \cdot x^4}$ $\dfrac{3}{5x^6}$

13) $\left(n^3\right)^2 n^2 \cdot 4n$ $n^6n^2 4n$ $4n^9$

14) $\left(\dfrac{4m^4}{m^{-2} \cdot 4m^3}\right)^3$ m^9

15) $\left(\dfrac{2r^2}{r^2 \cdot 4r^{-4}}\right)^3$

$\dfrac{2^3r^6}{r^6 \cdot 4^3 r^{-12}}$ $\dfrac{8r^6 r^{12}}{r^6 4^3}$

$\dfrac{8r^{18}}{64r^6}$