Review Unit 6

Agenda

Warm-Up
HW Check
Notebook Check/Work Time

Reminders

TEST tmr

Last call for unit 6 hw tmr!!

Warm-Up

Have out your HW ready to check!

Work on the yellow paper. It will go on p.76

Warm-Up Exponent & Polynomial Review

Adding	Subtracting	Multiplying	Dividing	Power
$2x+3x$	$2x^2-3x^2$	$(2x^2)(3x^2)$	$\frac{6x^2}{2x}$	$(2x^2)^2$
$(2x^3+3)+(9x^2+4)$	$(3x^2-3)-(2x^2-2)$	$(4x^3y)(5x^2y)$	$\frac{8x^2y^2}{4xy}$	$(4x^3y)^4$
$(3x^3+2x^2+4)+(4x^3-5x-2)$	$(2x^3+5x^2-2)-(5x^3-3x^2+3)$	$(5x^2y^3z^4)(15xy^2z^2)$	$\frac{-64x^5y^3z}{8x^3y^4z^3}$	$3x(5x^4y^6z)^5$
_____ Coefficients _____ Exponents	_____ Coefficients _____ Exponents	_____ Coefficients _____ Exponents	_____ Coefficients _____ Exponents	_____ Coefficients _____ Exponents

Warm-Up

Warm-Up Exponent & Polynomial Review

LIST OUT

Adding	Subtracting	Multiplying	Dividing	Power
$2x+3x$	$2x^2-3x^2$	$(2x^2)(3x^2)$	$\frac{6x^2}{2x}$	$(2x^2)^2$
$5x$	$-x^2$	$3x^2$ $xxxx$ $2x^2$ $\boxed{6x^4}$	$\frac{6}{2}=\boxed{3x}$	$(2x^2)(2x^2)$ $4x^4$
$(2x^3+3)+(9x^2+4)$	$(3x^2-3)-(2x^2+2)$	$(4x^3y)(5x^2y)$	$\frac{8x^3y^2}{4xy}$	$(4x^3y)^4$
$2x^3+7+9x^2$	x^2-1	$5x^2y$ $4x^3y$ $\boxed{20x^5y^2}$		$(4x^3y)(4x^3y)$ $(4x^3y)$ $(4x^3y)$ $256x^{12}y^4$
$(3x^3+2x^2+4)+(4x^3-5x-2)$	$(2x^3+5x^2-2)-(5x^2+3x^2+3)$	$(5x^2y^3z^4)(15xy^2z^2)$	$\frac{-64x^5y^3z}{8x^3y^4z^3}$	$3x(5x^4y^6z)^5$
$7x^3+2x^2+2-5x$			$\frac{-8x^2}{yz^2}$	
combine (add)	combine	Multiply	Divide	
Keep	Keep	Add	Subtract	
_____ Coefficients	_____ Coefficients	_____ Coefficients	_____ Coefficients	_____ Coefficients
_____ Exponents	_____ Exponents	_____ Exponents	_____ Exponents	_____ Exponents

combine like terms

Quesons, Comments, Concerns?

Algebra I - Unit 6 – Multiplying Polynomials

Practice – Multiplying Polynomials Day 2

Name _____ Date _____ Period _____

Find the product in simplest form.

1. $(x+1)(x+4)$

2. $(2n+3)^2$

3. $(2m+1)(m+3)$

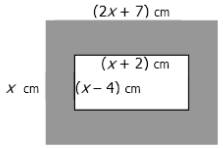
4. $(x+1)(-3x+1)$

5. $(k+12)(3k-2)$

6. $(n+1)(n^2+4n+5)$

7. Find the area of a square with side lengths $(2r+7q)$ units.

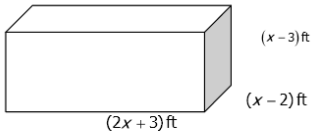
8 .Find the area of the shaded region.



Bonus:

1. $(y^2+7y-1)(y^2-6y+5)$

2. Write a polynomial, in simplest terms, to represent the volume of the rectangular prism.



Review Unit 6

1. $2(x+1)(x-2)-4(x^2+2x-3)$

A. $-2x^2-8x+16$

B. $-2x^2-10x+8$

C. $-2x^2+16$

D. $-2x^2+8$

$2(\boxed{})$

Type question in $Y_1=$

Answer choice in $Y_2=$

2nd TABLE

2. $5(x+3)(x+2)-3(x^2+2x+1)$

A $2x^2+7$

B $2x^2+27$

C $2x^2+7x+7$

D $2x^2+19x+27$

Unit 6 Review

You have 5 minutes to get your notebook in order.

~~NOW:~~ You will trade your notebook with a neighbor.

Unit 6 Review

~~Notebook Owner:~~

~~Grader:~~

~~Grade:~~

~~Reason(s):~~

You will receive a grade for your notebook and for grading someone else's notebook! You must write down reason (s) for ~~any~~ grade given!

Turn to the beginning of unit 6.

~~Ask yourself:~~

- Is the table of contents completed?
- Does the unit have a title?
- Are the pages numbered?
- Are notes completed on each page?
- Do applicable pages have essential questions written?

Take off 5 points for each "No"

Review Unit 6

Completed review is worth +10 points on test.

Answers will be posted on twitter/website.

~~http://www.mskmath.com~~

ALL late HW (4.3, 4.4, integer exponents, multiplication properties) due tomorrow - no exceptions.

Algebra I
Unit 6 Review

BOLD question number - focus on!!

Name _____

Remember to study any old quizzes, homework, and your notes!

Simplify each expression.

1. $\frac{7x^3y^2}{14x^5y^2z^0}$

2. $(3y^2)^3$

3. $\frac{3x^7}{6x^3}$

4. $(3x^2y^3z)(-7x^4y^{-8})$

5. $\left(\frac{(2xy^2)(3x^3y)}{24x^5y}\right)^0$

6. $\frac{x^{-5}}{x^{-2}}$

7. $2(8x^2+3x)-(5x^2-6x-9)$

8. $2(x+1)(x-2)-4(x^2+2x-3)$

9. $(3x-4)(x+2)$

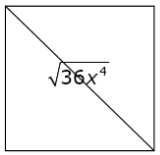
10. $(2m+1)^2$

11. Which expression is equivalent to $(16a^{-2}b^{10})^{\frac{1}{2}}$?

a. $\frac{8b^5}{a}$ b. $\frac{4b^5}{a}$ c. $4ab^5$ d. $256a^{-4}b^{20}$

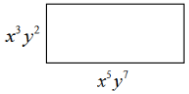
12. The length of the diagonal in a square has a measure of $\sqrt{36x^4}$. Which expression represents the length of the diagonal in simplest form?

A. $6x^2$
B. $18x^2$
C. $72x^8$
D. $6x^4$



13. If the area of a rectangle is $21a^3b^2$ and the width is $7ab$, find the length.

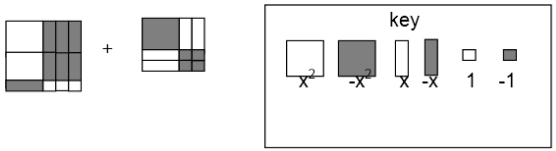
14. Find the area of the rectangle in terms of x and y. Put your answer in simplest form.



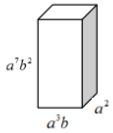
15. Which expression is equivalent to $\frac{x^a y^b y^c}{x^d}$?

A. $x^{(a-d)}y^{(b+c)}$ B. $xy^{(a+b+c-d)}$ C. $x^{(a+d)}y^{(b+c)}$ D. $xy^{(a+b+c)}x^d$

16. Look at the two polynomials modeled below using algebra tiles. Write an expression that describes the sum of the two polynomials in terms of x.



17. Find the volume of the prism in terms of a and b. Put your answer in simplest form.



18. Classify the following polynomials as monomial, binomial, or trinomial.

a. $2x^2 + x - 4$ _____

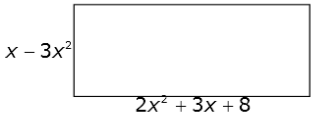
b. $a^2b^3c^4d$ _____

c. $x + 2$ _____

19. For all real numbers x and y, which of the following statements is always true?

A $(3x)^4 = 12x^4$ B $(x^3)(x^5) = x^{(3)(5)}$ C $(x^2y^4)^3 = x^6y^{12}$ D $(4x^4)(y^4) = (4xy)^4$

20. Write a polynomial in simplest form that represents the perimeter of the figure.



21. Find the area of the shaded region. Remember to check your answer!