Name: Date:

Unit #1 -Review sheet. Yes!

Part I Questions:

1. Which of the following is the value of the expression $2x^2 + 1$ when x = -2?

$$2(-2)^2+1$$

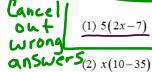
$$\int_{(1)(2+8)+(1+9)=(8+2)+(9+1)}$$

$$(3)$$
 5+2 $(3+4)$ =5+6+8

(2)
$$5(2+7)=10+35$$

$$(4)(3+7)+2=3+(7+2)$$

3. Which expression below is equivalent to 10x-35? DISTRIBUTIVE



$$(3) 10(x-5) = 10 \times -50$$

(4) 10(x-35) = 10X - 350

= 10X - 35X 4. The product of the binomial (3x+2) with the binomial (2x-1) can be written equivaled

(1)
$$5x+1$$

(3)
$$6x^2 + x - 2$$



(2)
$$6x - 3$$

$$(4) 6x^2 - 2$$

5. Written in simplest exponential form the product $(3x^7)(-2x^3)$ is?



(3)
$$x^4$$

$$-6 \times^{45} = -6 \times^{10}$$

$$(2) -6x^{10}$$

$$(4) -6x^{21}$$

- 6. What is the first step in simplifying the expression $(2-3\times4+5)^2$
- 1) square 5
- 2) add 4 and 5
- 3) subtract 3 from 2

4) multiply 3 by 4

7. Which of the following is equivalent to $(x+5)^2$?

(1) $x^2 + 10x + 25$ (3) 2x + 25 (4) 2x + 10(2) $x^2 + 25$ (4) 2x + 10(3) 2x + 25 (4) 2x + 10(4) 2x + 10(5) Subtracting x = 1/2, x = 6(7) Subtracting x = 1/2, x = 6(8) If the expression $3 - 4^2 + \frac{6}{2}$ is evaluated, what would be done last?

(8) Subtracting x = 1/2, x = 6

3-16+5

9. Which number is rational?

- 10. Which is an irrational number?

500 his = x his

- 4) $\sqrt{9} = 3 \text{ J}$ 11. It takes a snail 500 hours to travel 15 miles. At this rate, how many hours will it take the snail to travel 6 miles?
- 1) 0.18
- 2) 5.56

500 hrs X hrs

- 500 hrs -> 15 miles 7 hrs -> 6 miles

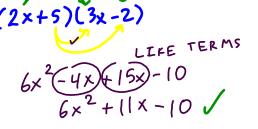
Free Response Questions:

12. What is the value of the expression $-3x^2y + 4x$ when x = -4 and y = 2?

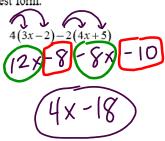
$$-3(-4)^{2}(2) + 4(-4)$$

$$-3(16)(2) + (-16)$$

$$-3(32) - 16 = -96 - 16 = -112$$
13. Multiply and write an expression that is equivalent to $(2x+5)(3x-2)$.



14. Write the following expression in simplest form.



- 15. Consider the binomial expression 3x+1.
 - (a) What property is illustrated in the identity shown below?

$$DISTRIBUTIVE$$

(b) What property is illustrated in the identity shown below?

$$ASSOCIATIVE$$