Name: _____ Date: _____ Period: _____

Unit 6 Review – CC Math6

REMEMBER: Partial credit is granted only when work is shown and comprehensible!

Write the definitions of the terms in your own words, make your own expression, and give the examples from your expression.

Your Own Expression		
	Definition	Example
Variable		
Term		
Coefficient		
Quantity		
Constant		

1. **Explain the difference between Like and Unlike Terms & provide examples.**

2. **Which pair of expressions are equivalent?**
   3g +h and 3(g+h)   p – o and o – p   7wz and 3w + 4z   4(x + y) and 7x + 4y – 3x

Simplify each expression. Write your answer neatly on the line.

3.   = _____

4.   = _____

5.   = _____

6.   = _____

Translate the following words into algebraic expressions.

7. *the sum of p and 10* _____ **9.** *the quotient of q and 2*_____

8. *14 less than the product of r and 18* **10.** *The product of 5 and the sum of 7 and d*

_____ _____

Translate the following algebraic expressions into words and the following words into algebraic expressions.

11. Seven divided by the sum of a number and 3 _____

12. _____

Evaluate when x = 3. Answer_____

13. Subtract 16 from the quotient of 4 and t _____

Write and evaluate the expressions:

14. The formula for the perimeter of rectangle is _____ . The length of the rectangle is 3 units shorter than the width. Write an algebraic expression that can be used to find the perimeter of the rectangle.

_____

15. What is the perimeter of the rectangle in Question 16 if the length is 5 cm? _____

16. Five less than two times a number is 11. Which equation could be used to find the number?

A. $2b - 5 = 11$ B. $5 - 2b = 11$ C. $2(b - 5) = 11$ D. $5(2b) = 11$

17. Angie and her friends want to go to the opening night of an upcoming movie. In order to avoid the long lines at the ticket counter, Angie agreed to order all the tickets online. There are two main websites that sell tickets.

Fandango.com: Tickets are $8 each with a $1 handling fee per ticket

Ticketmaster.com: Tickets are $10 each with a handling fee of $2 total (*not per ticket*)

a.   Write an expression for the price to order "m" tickets on each website.
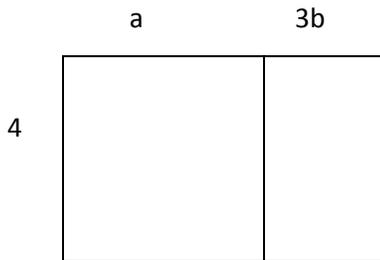
Fandango.com: _____

Ticketmaster.com: _____

18. You are taking your car in to get fixed. They tell you it will cost you $35 an hour for labor and $212 for the parts. If they work on your car for 4 hours how much will you owe them?

_____

19. The Carolina Panthers sell their tickets for $20 to adults and $12 for kids. Write an expression that represents the total amount of money spent at a game.

_____

Suppose 45 adult tickets were sold and 12 student tickets were sold in the first ten minutes. How much money was spent?

_____

Use the distributive property to represent the area model. (Don't forget to also simplify the expression)
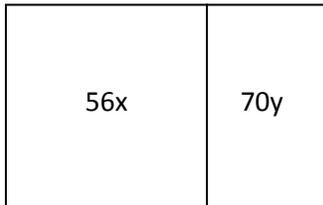
20.

	a	3b
4		

Expression: _____

Answer (simplified): _____

Find the GCF to create an equivalent expression.

21.

56x	70y

Expression: _____