Expressions Study Guide

Name: Key *Test Date:* _____

Vocabulary. You will not use ALL the choices.

Expression: C

Coefficient: A

Constant: E

Term: B

Variable: F

Like Terms: H

A. A number that multiplies a variable

B. Numbers, letters or a combination separated by operators

C. A number sentence without an equal sign

D. A number that when added to another number equals zero

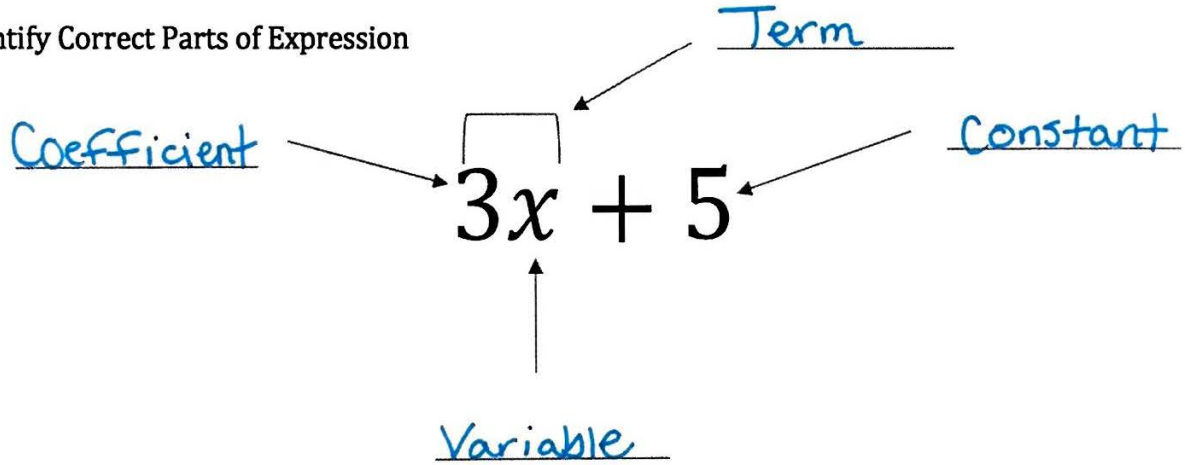
E. A number not multiplied by a variable

F. A letter used to represent an unknown quantity

G. A positive or negative whole number

H. Terms with the same variables and powers

Identify Correct Parts of Expression



Expressions Study Guide

Name: Key *Test Date:* _____

Combine Like Terms

Expression	Simplified
$2x + 3y + 8x - 4$	$10x + 3y - 4$
$3m + -3m + 4m + y$	$4m + y$
$-5x + x - 2y + 4y + 2$	$-4x + 2y + 2$
$2x + 7y + 2 + x + y$	$3x + 8y + 2$
$2x^2 + y + x^2 - 3y - 4x$	$3x^2 + y - 4x$
$5x + y^3 + 2y^3$	$5x + 3y^3$

Distribute

$4(7y - 2)$ $28y - 8$	$6(-q + 3r - 8)$ $-6q + 18r - 48$	$.3(4a + b + 10)$ $12a + 3b + 30$

Distribute & Combine Like Terms

$12(3x + 2) - 24$ $36x + 24 - 24$ $36x$	$3x + 5(x + y)$ $3x + 5x + 5y$ $8x + 5y$	$-7(2m + 6) + 8m - 17$ $-14m - 42 + 8m - 17$ $-14m + 8m - 42 - 17$ $-6m - 59$

Expressions Study Guide

Name: _____ Test Date: _____

Factor

4x + 12	12y – 36	60y + 20x + 80
$4(x+3)$	$12(y-3)$	$20(3y+x+4)$
2 | 4 12 2 | 2 6 1 3 GCF = 4	2 | 12 36 2 | 6 18 3 | 3 9 1 3 GCF = 12	2 | 60 20 80 2 | 30 10 40 5 | 15 5 20 3 1 4 GCF = 20

Write three equivalent expressions for the perimeter of the rectangle:

* $2y + 6y + 8 + 2y + 6y + 8$

$2y + 6y + 2y + 6y + 8 + 8$

$8y + 2y + 6y + 8 + 8$

$10y + 6y + 8 + 8$

$16y + 8 + 8$

* $16y + 16$

* $16(y + 1)$

Write three equivalent expressions for $3(-4x + 5)$

$-12x + 15$

$-3(4x - 5)$

$3(-4x + 5)$

Yessenia simplified an expression as shown below:

Given:	x + 6 + 3(x + 4)
Step 1:	x + 9(x + 4)
Step 2:	x + 9x + 36
Step 3:	10x + 36

In which step did Yessenia make a mistake?

Step 1

What should she have done instead?

Added 6+3 before doing distributive property with 3(x+4)