

## Clearview Regional High School District 2019 Summer Assignment Coversheet

<b>Course:</b>	<b>Honors Algebra 1</b>	
<b>Teacher(s):</b>	Miller, Wescott, Catts, Paoletti	
<b>Due Date:</b>	<b>September 6, 2019</b> (checked for completion only)	
<b>Purpose of Assignment:</b>	To assess the students understanding of concepts necessary for Honors Algebra I.	
<b>Description of Assignment:</b>	Students will solve problems involving fractions, integers, expressions, equations, inequalities and graphs. All problems are to be solved without the use of a calculator.	
<b>New Jersey Student Learning Standards covered:</b>	The Number System MA.7.7.NS.A.1, MA.7.7.NS.A.2, MA.7.7.NS.A.3	
	Expressions and Equations MA.7.7.EE.A.1, MA.7.7.EE.A.2, MA.7.7.EE.A.3, MA.7.7.EE.A.4	
	Ratios and Proportional Relationships MA.7.7.RP.A.2, MA.7.7.RP.A.3	
<b>Grading/Use of Assignment: Category/Weight for Q1:</b>	The actual packet will be checked for completion and will count as a homework grade. <b>All work</b> must be shown to receive full credit. The students will also be quizzed on this material on <b>September 10<sup>th</sup></b> . Quizzes are 30% of your grade.	
<b>Specific Expectations:</b>	Students are to try every problem. Students should also come to class with questions on any problems they did not understand.	
<b>Where to Locate Assignment:</b>	Clearview Website	
<b>Teacher Contact Information:</b>	Mrs. Jill Miller <a href="mailto:millerji@clearviewregional.edu">millerji@clearviewregional.edu</a>	Mrs. Karisa Wescott <a href="mailto:wescottka@clearviewregional.edu">wescottka@clearviewregional.edu</a>
	Mrs. Anne Paoletti <a href="mailto:paolettia@clearviewregional.edu">paolettia@clearviewregional.edu</a>	Mrs. Cheryl Catts <a href="mailto:cattsch@clearviewregional.edu">cattsch@clearviewregional.edu</a>
<b>Additional Help/Resource(s):</b>	Learnzillion.com, mathisfun.com, khanacademy.org, analyzemath.com, freemathhelp.com, analyzemath.com	

## Operations with Rational Numbers

Add, Subtract, Multiply or Divide.

1] $-12 + 4 =$	2] $-15 + (-7) =$
3] $-23 - 56 =$	4] $17 - 43 =$
5] $-25 - (-12) =$	6] $42 + (-13) =$
7] $-8(-9) =$	8] $\frac{-54}{-6} =$
9] $-18 - (-24) =$	10] $-32 - 81 =$
11] $-13 \cdot 11 =$	12] $-18.4 - 12.9 =$
13] $-33.58 \div 2.3 =$	14] $-8.3(-13.7) =$
15] $-\frac{4}{5} + \frac{2}{3} =$	16] $\frac{1}{2} - \frac{8}{9} =$
17] $-\frac{7}{11} - 3\frac{1}{3} =$	18] $1\frac{4}{7} - (-2\frac{5}{6}) =$
19] $\frac{25}{36} \cdot (-\frac{54}{55}) =$	20] $-1\frac{3}{4} \div (-1\frac{5}{16}) =$

## Order of Operations

Evaluate each expression.

1] $(-4) \cdot 6 + (-9 - 5) =$	2] $9 \cdot 5 - 64 \div 16 + (-42) =$
3] $-7 + 4 + (3^3 - 12 \div 6) =$	4] $6 + (-18) - 7 \cdot 4 + 5^2 =$
5] $-72 \div 9 + (3^2 - 60) =$	6] $\frac{18 - 24 \div 4}{4^2 - (-4)}$
7] $5(-5 - 7) \div 15 + (-12) =$	8] $5(14 - 42 \div 3) + 12 \cdot \frac{1}{4}$
9] $-162 + [6(17 - 14)^2] \div 3 =$	10] $\frac{4\{10 - (27 \div 9)\}}{(3 - 7)^2}$

## Variables and Expressions

Write an algebraic expression for each word phrase.

1] 4 less than $x$	2] 5 times the sum of a number $b$ and 4
3] the sum of 15 and $m$	4] 20 increased by a number $h$
5] one third of a number $a$	6] the difference of 9 and a number $n$
7] the quotient of 12 and $b$	8] 6 increased by the product of 3 and $p$

## Substitution

Use substitution to determine whether the solution is correct.

1] $2x - 3 = 15$ ; $x = 9$	2] $3b + 4 = -10$ ; $b = -4$
3] $4 - 2m = 8$ ; $m = -2$	4] $5p + 12 = 24$ ; $p = 2$
5] $5a - 12 = -27$ ; $a = -3$	6] $20 - 4n = 32$ ; $n = -3$

## Evaluating Expressions

Evaluate each expression when  $a = 6$ ,  $b = -3$ ,  $c = -2$ , and  $d = \frac{1}{3}$ .

1]  $a + b - c$

2]  $3a - 2b$

3]  $4c - 3b - 9$

4]  $-18d - 4a$

5]  $\frac{6a-12}{2c}$

6]  $ab - 7c - 30d$

7]  $-4a - 2b - 3c$

8]  $2bc - ad$

## Solving Proportions

Solve each proportion below. Show all work.

$$1] \frac{x}{21} = \frac{3}{63}$$

$$2] \frac{5}{x+1} = \frac{3}{12}$$

$$3] \frac{x}{5} = \frac{x+1}{10}$$

$$4] \frac{5}{2x} = \frac{3}{2x-1}$$

$$5] \frac{4}{5x} = \frac{2}{7}$$

$$6] \frac{3}{2x+5} = \frac{2}{x-4}$$

$$7] \frac{-5}{x+3} = \frac{2}{x-4}$$

$$8] \frac{x-3}{x} = \frac{1}{4}$$

## Distributing and Combining Like Terms

Simplify each expression.

1] $12a + 3b + 7a + 8b$	2] $-8n - 4m + 6n - 3m$
3] $14x + 12y - 8 - 8x - 16y$	4] $-6c - 15d + 12 - 2c + 15d - 18$
5] $3(5m - 8)$	6] $4(2a - 3) + 7a$
7] $5(3m + 4n) + 6(m + 2n)$	8] $3(4a - 2b) + 4(5a - b)$
9] $6(2x - 3y) - 3(4x - 2y)$	10] $-2(3c - 4d) - 4(6c + 2d) + 6d$
11] $3(5m + 2) - 2(4m - 3n) + 6$	12] $2(4x - 3y - 8) - 3(5x - 2y + 7)$

## Solving Equations

Solve each equation.

1] $4n - 8 = 40$	2] $\frac{3}{4}a - 12 = -3$
3] $-\frac{b}{4} + 7 = -10$	4] $-\frac{2}{5}m - 14 = -24$
5] $-10c + 14 = 9$	6] $-13a - 29 = -12a + 2$
7] $7z + 6 = 12z - 19$	8] $8m - 20 = -3m + 35$
9] $12n + 15 = 23 + 8n$	10] $5(d - 6) = 8d + 18$
11] $-18x - 14 = -24x + 6$	12] $\frac{2}{3}(6x - 18) = -3x + 9$



Solve each equation.

13]  $7a - 4 - 12a = 5(2a - 1)$

14]  $-4(3m - 8) = 2(5m + 3)$

15]  $3y + 3 = 8(y + 9) - 2y$

16]  $4(3b + 1) = 2(b - 3) - 10$

17]  $3(2x + 5) - 15 = 4x + 22 - 9x$

18]  $3 - 6(-3x + 1) = 4 + 2x - 11$

19]  $14 + 6x - 44 = -3(x - 5)$

20]  $\frac{5}{6}(24m - 42) = 4(2m - 3)$

# Equations, Tables, and Graphs

Complete each table, then graph.

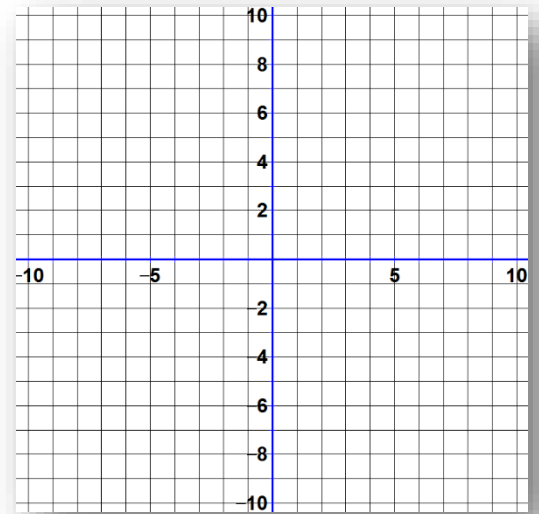
**Problem**

**Work**

**Graph**

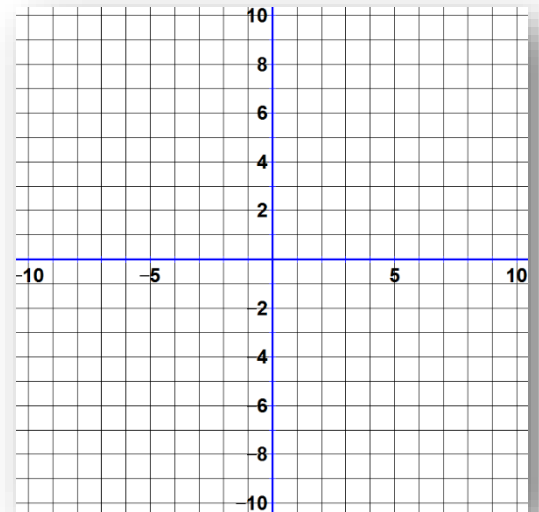
1]  $y = 2x - 3$

x	y
-2	
-1	
0	
1	
2	



2]  $y = -3x + 2$

x	y
0	
1	
2	
3	
4	



3]  $-4x + y = 1$

CHOOSE YOUR OWN VALUES FOR X ☺

x	y

