Clearview Regional High School District
2019 Summer Assignment Coversheet

Course:	Advanced Math 7 and Math 7
Teacher(s):	Massi, Miller, Musto, Santoro, Guida
Due Date:	OPTIONAL
Purpose of Assignment:	To assess the students understanding of concepts necessary for success in Math 7 and Advanced Math 7.
Description of Assignment:	Students will solve basic skills problems (involving whole numbers, fractions, and decimals) and larger word problems. All problems are to be solved without the use of a calculator.
New Jersey Student Learning Standards (Content) covered:	The Number System 6.NS.1, 6.NS.2, 6.NS.3, 6.NS.4, 6.NS.8 Expressions and Equations 6.EE.2 Geometry 6.G.1, 6.G.2
Specific Expectations:	This assignment is optional. Students may complete the packet and seek additional practice (see additional resources below) for any developing skills where needed.
Where to Locate Assignment:	Clearview Website www.clearviewregional.edu
Teacher Contact Information:	Mrs. Jill Miller millerji@clearviewregional.edu Ms. Nicole Santoro santoroni@clearviewregional.edu Mr. Thomas Guida guidath@clearviewregional.edu Mr. Dan Massi massida@clearviewregional.edu Ms. Sarah Musto mustosa@clearviewregional.edu
Additional Help/ Resource(s):	virtualnerd.com, khanacademy.org, learnzillion.com, mathisfun.com, analyzemath.com, freemathhelp.com

Welcome to Clearview Middle School!
Math 7 and Advanced Math 7

This assignment is designed to help you start Math 7 or Advanced Math 7 successfully. It may also help you identify any areas that you need to strengthen beforehand. Math 7 covers all 7th grade standards and focuses on fluency and retention for success in 8th grade. The Advanced Math 7 course is designed to increase the level of challenge within the 7th grade standards. This course moves at an accelerated pace, includes timed assessments throughout the year (many without the use of a calculator), and includes work with some 8th grade concepts. It is expected that all students in Advanced Math 7 have mature work habits and the ability to problem solve both collaboratively and independently.

I. Skills Fluency

Add, Subtract, Multiply or Divide as indicated. Show correct work without the use of a calculator.

1] 35×26	2] 493×67
3] Use long division: $2230 \div 9$	4] Use long division: $1620 \div 36$
5] $43.96 + 82.78$	6] $146.53 - 65.9$
7] 12.5×3.7	8] Use long division: $5.224 \div 0.08$

9] $\frac{3}{4}+\frac{5}{7}$	10] $\frac{7}{9}-\frac{3}{5}$
11] $5\frac{2}{3}+3\frac{5}{8}$	12] $8\frac{6}{7}-2\frac{2}{3}$
13] $10\frac{1}{3}-3\frac{7}{8}$	14] $\frac{27}{40}\times\frac{20}{63}$
15] $\frac{25}{36}\div\frac{35}{48}$	16] $2\frac{1}{2}\bullet 3\frac{1}{5}$
17] $6\frac{2}{5}\div 20$	18] $5\frac{1}{4}\div 2\frac{1}{7}$

Evaluate using the Order of Operations

19] $7 \times (4^3 - 6) \div 2$	20] $20 \div 5 \times 2 - (6 + 2) \times 7$

Evaluate if $a = 9$ and $b = \frac{1}{4}$.

21] $5a - 12b$	22] $36b + 7a$

Change the mixed numbers to improper fractions.

23] $6\frac{11}{17}$	24] $9\frac{3}{61}$

Change the improper fractions to mixed numbers.

25] $\frac{10}{7}$	26] $\frac{132}{11}$

Find all the factors.

27] 45	28] 72

Find the Least Common Multiple of the two numbers.

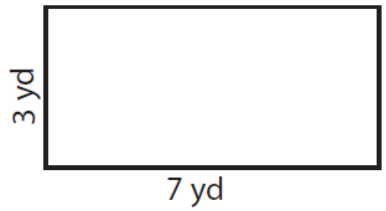
29] 8 and 10	30] 108 and 72

Simplify to lowest terms.

31] $\frac{66}{99}$	32] $\frac{35}{42}$

Find the area of each figure.

33]



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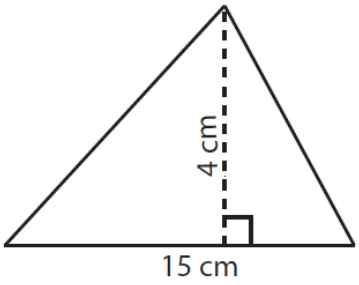

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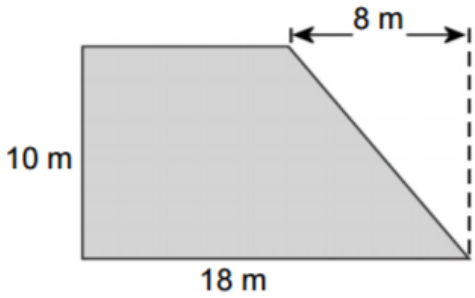

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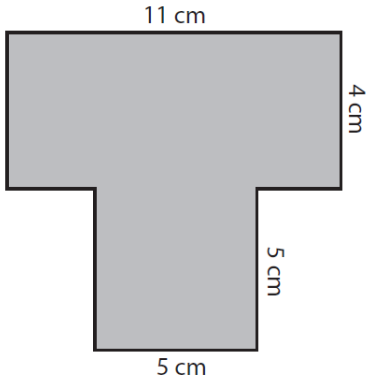

Find the surface area and volume of each rectangular prism.

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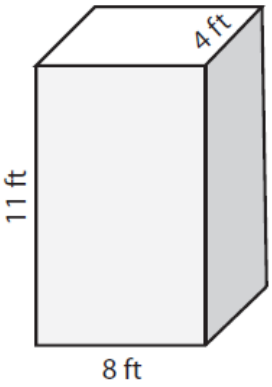

Surface Area = _____

Volume = _____

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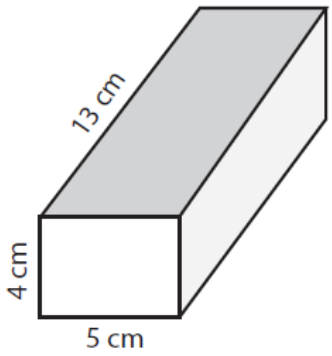


Surface Area = _____

Volume = _____

II. Make Sense of Problems and Persevere in Solving Them

Remember, we are not looking for perfection. We are looking for written evidence that you are doing your best to make sense of the problem and persevering in solving it. These problems are based on 6th grade standards, so you have all the math knowledge you need to solve them! Enjoy.

These problems are taken from www.illustrativemathematics.org

Illustrative Mathematics

P1. **Rectangle Perimeter** - Sadie computes the perimeter of a rectangle by adding the length, l , and width,w , and doubling this sum. Eric computes the perimeter of a rectangle by doubling the length, l , doubling the width, w, and adding the doubled amounts.

a. Write an expression for Sadie's way of calculating the perimeter. Write an expression for Eric's way as well.

b. Use both of the expressions to find the perimeter of a rectangle with length 30 and width 75.

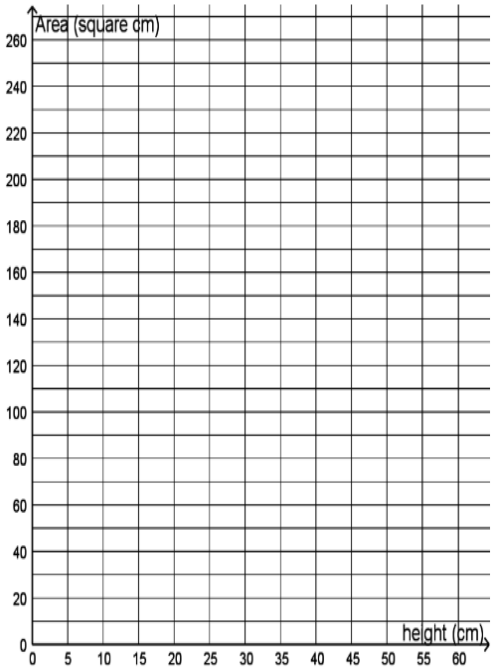
c. Explain why Sadie and Eric always get the same answer, no matter what the length and width of the rectangle are.

P2. **Families of Triangles** - There are a bunch of triangles. They all have one side that is 10 centimeters long, which we will consider as the base of the triangle.

a. The triangles each have a different height (as measured off of the 10-centimeter base) and so have different areas. Fill in the table:

Height (cm)	Area (cm^2)
20	
25	
40	
	250

b. Plot the ordered pairs from the table in the coordinate plane and label them with their coordinates.



c. Where can you see the answers to part (a) in the coordinate plane?

d. If A represents the area and h represents the corresponding height, write an equation using A and h that represents the area of any such triangle.