Welcome to Pre-Algebra 8

I thank you for your continued dedication to your studies through this past rollercoaster of a trimester. I want you to take some time to mentally and physically relax and enjoy the great weather ahead. However throughout the summer, we have to keep our math skills sharp; so I have attached 6 weeks of work for you to complete.

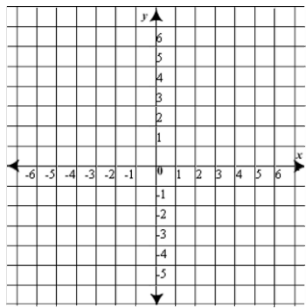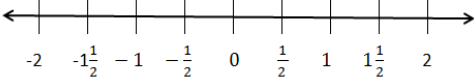Your summer math review has 2 parts:

- 6 weeks of pencil and paper review problems
- and 30mins a week of IXL.
    - IXL skills to be practiced over the summer break are listed. You should also work on the recommendations listed on your dashboards from IXL.
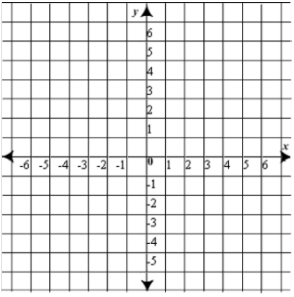
All math summer work is due on September 4th.

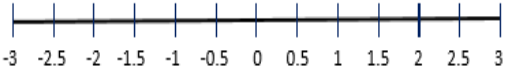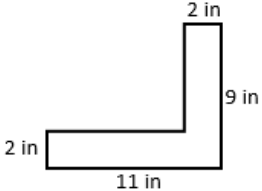I look forward to seeing you all in September and hearing all about your summer activities.

If you have any questions, please email me
jclarke@saintroseschool.com

Have a great SUMMER!!

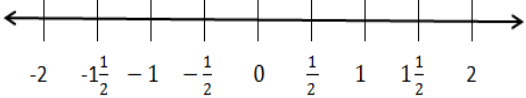|	
1. Review Use Order of Operations to simplify. $$3^3 + 2[64 - (3 \times 7)]$$	**2.** Review Plot the following points to create a rectangle. Find the missing vertex. (5,3); (-5,3); (-5,-1)
3. Review Jon places a point on a coordinate plane at (-1, -12). He wants to place another point across the y-axis, and it must be 11 points. Where will Jon place the other point?	**4.** Review Fill in the Blank 5.5 quarts = _____ pints
5. Review How long will it take you to ski a distance of 24 miles at a speed of 6 miles per 30 minutes?	**6.** Review Determine two numbers that have a product of 40 but have a sum of 13.
7. MCC.7.NS.1c Use the diagram below to find the solution to $1\frac{1}{2} - 3$ and place a point on your answer. -2 -1½ -1 -½ 0 ½ 1 1½ 2	**8.** MCC.7.NS.1c Simplify: $1.3 + (-6) + (-4.25) =$

1.   Review

Plot the following points to create a rectangle. Find the missing vertex.
(4,0); (-6,0); (-6,-4)

2.   Review

Steph places a point on a coordinate plane at (3, -2). She wants to place another point across the x-axis, and it must be 7 units away. Where will Steph place the other point?

3.   Review

Fill in the Blank

12 pints = _____ quarts

4.   Review

How long will it take you to bike a distance of 108 miles at a speed of 24 miles per hour?

5.   Review

What is the **GCF** of 44 and 20?

6.   MCC.7.NS.1c

Simplify
$16 - 1.42 + (-1.5)$

7.   MCC.7.NS2

Multiply:

$$\left(-\frac{3}{10}\right)\left(-\frac{2}{9}\right)$$

8.   MCC.7.NS2

A recipe for cake needs $2\frac{1}{4}$ cups of cake. You are making ½ of the recipe. How many cups of flour do you need?

1. _{Review}

What is the **LCM** of 5 and 12?

2. _{Review}

At the bake sale, the students earned $48.81. If there were 3 students, how much did each student earn?

3. _{Review}

Solve.

5^3 2.5^2

4. _{Review}

Notebooks cost $1.20 each. This weekend they will be on sale for $0.80. What percentage off of the original cost is the sale?

5. _{MCC.7.NS.1}

The table shows a bank account balance for 2 days.

| **Balance** | $44 | –$28 |

How much did the bank account change over the two days?

6. _{MCC.7.NS.2}

Simplify:

$$-\frac{6}{5} \div 2\frac{2}{5}$$

7. _{MCC.7.NS.2d}

> , <, or =

$$-\frac{26}{9} \underline{\hspace{1cm}} -2.75$$

8. _{MCC.7NS.2d}

Simplify:

$$\frac{8}{5} + 8.25$$

1.

Place the following numbers on the number line.
-2.42, -0.8, 0.33, 1.23

-3 -2.5 -2 -1.5 -1 -0.5 0 0.5 1 1.5 2 2.5 3

2.

List 3 values that would make this inequality true.

$$42 \leq y$$

_____, _____, _____

3.

Find the area.

2 in

9 in

2 in

11 in

4.

Jon's weight loss for each week of the month is 5 lbs., 2.5 lbs., and 2.5 lbs. He gained 3.5 lbs. the last week. If Jon originally weighed 198 lbs., how much does he weigh now?

5.

Multiply the following

$$1\frac{5}{6} \cdot 2\frac{1}{3}$$

6.

Evaluate the expression. Write the answer as a decimal

$$\left(\frac{2}{5} + 1\right) \times (6 - 2)$$

7.

Solve the equation:
$$16 = 2x - 6$$

8.

To join a local gym, Ian has to pay a $80 sign-up fee plus $35 per month. Write an equation for the cost (y) based on the number of months (x).

Name: Summer Weekly Math Review #5   Pre-Alg

1. Review A group of 150 dancers are auditioning for a dance show. 62% of the dancers trying out did not get on the show. How many dancers didn't get on the show?	**2.** Review Find the quotient. $15\sqrt{28,395}$
3. MCC.7.NS.1 Subtract −14.2 from −5.3	**4.** MCC.7.NS.2 Jim had $2,052.24 in his checking account. He wrote a check to pay for two airplane tickets. His account now has $1,084.12. How much did each ticket cost?
5. MCC.7.NS.2d Simplify: $\dfrac{8}{10} + 6.25$	**6.** MCC.7.EE.4 Solve the equation: $\dfrac{x}{2} - 5 = -12$
7. MCC.7.EE.1 Find the GCF of 14x and 18xy	**8.** MCC.7.EE.1 Circle the GCF of $22x^2y$ and $18xy^2$. $22x^2y$: $2 \cdot 11 \cdot x \cdot x \cdot y$ $18xy^2$: $2 \cdot 3 \cdot 3 \cdot x \cdot y \cdot y$

1.   Review

A class of 50 students in a P.E. class has dressed up for class. 38% of them have on white shirts. How many students have on white shirts?

2.   MCC.7.NS.1

Simplify

$$-\frac{4}{5} + \left(-\frac{5}{3}\right) =$$

3.   MCC.7.NS.2

If you erased $\frac{1}{4}$ of the shaded part below. How much of the original figure will be shaded?

4.   MCC.7.NS.2d

Place the following fractions on the number line.

$$-\frac{6}{3}(a), \frac{18}{12}(b), \frac{5}{2}(c), -\frac{2}{2}(d)$$

5.   MCC.7.EE.4

Solve the equation:
$$3(x - 4) = -21$$

6.   MCC.7.EE.1

Find the GCF of 16a and 32ab.

7.   MCC.7.EE.2

Two sides of a rectangle are $x - 7$ and $2x + 1$. Write an expression that represents the perimeter of this rectangle.

8.   MCC.7.EE.1

Simplify the following expression:
$$3(2w - 4y + 3) + 6w - 6$$

Pre-Algebra 8 Summer IXL checklist of skills

When you log into IXL, under the search for skill enter the numbers and letter combo in parentheses or the common core standard indicated in bold to find these skills.

8.NS.A.1

Convert between decimals and fractions or mixed numbers (8 - D.4)

Identify rational and irrational numbers (8- D.5)

8. EE.A.1 Know and apply the properties of integers to exponents. Solve using exponents with negatives, understanding negative exponents, using multiplication and division with exponents.

8.EE.A.2

Square roots of perfect squares (8-G.15)

Cube roots of positive perfect cubes (8-F.20)

8.EE.A.3

Convert between standard and scientific notation (8-G.1)

Compare numbers written in scientific notation(8-G.2)

8.EE.B.5 Graph proportional relationships interpreting the unit rate as the slope of the graph compare two different proportional graphs represented in different ways.

8.EE.B.6 Use similar triangles to clean why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane use slope intercept form interpreting the y intercept.

8.EE.C.7b

Solve two step equations (8-W.8)

Solve equations involving like terms (8-W.10)

8.F.B.4 Find the slope of a graph, find the slope from two points, use the slope intercept form to find the slope and the y-intercept, graph a line using slope, and identify the constant rate of change.