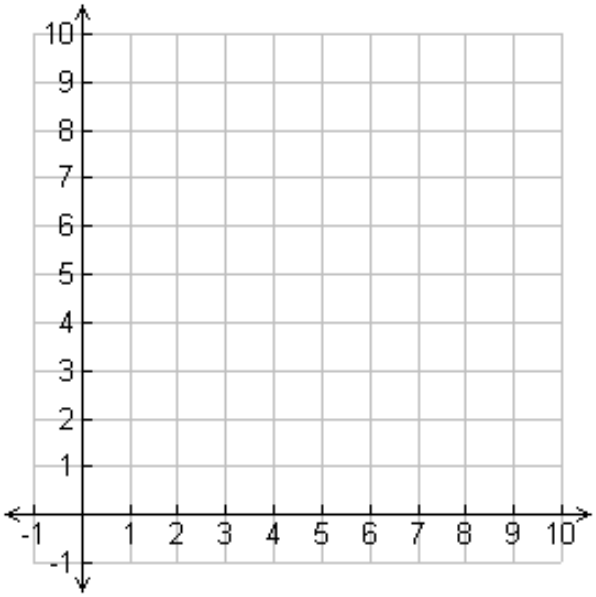
Sixth Grade Spiraling Review
Week 1 of Third Six Weeks

Materials: Spiraling Review Cards run on cardstock and cut for each group of students.
Note: Record all work in your math journal.

Day 1 Spiraling review cards see attachment	Distribute a set of the Spiraling Review Cards to each table group of four, with the decimal card separated from the deck. Shuffle the deck, and place it face down on the table. • *Each student pair will draw 4 cards from the deck and arrange them to create a decimal number that has the tenths place and is the greatest possible value. Record the number in your math journal.* • *Place the cards back in the deck. Shuffle the cards. The student pairs will draw 4 more cards from the deck and arrange them to create a number with the smallest possible value. Record the number in your math journal.* a) Prior to beginning the game, discuss your strategy with your partner on how to create the greatest and smallest possible numbers. Record a written description of your strategy in your math journal. b) Record the numbers you created from the first 4 cards drawn. Write a statement to justify why the number is the greatest possible value. c) Record the numbers you created from the second 4 cards drawn. Write a statement to justify why the number is the smallest possible value. d) Find the difference between your greatest and your least created numbers. e) Find the difference of the other pair of students at your table and describe how it compares to your difference.
Day 2	Mrs. Neumann has 60 markers, 45 pencils, and 30 highlighters. She wants to divide the school supplies into equal groups. a) What is the greatest number of groups she can make using all the supplies? Justify your response. b) What is the math vocabulary term that represents the greatest number of groups?
Day 3	Andrew goes to school 8 hours during a 24 hour period. a) Write a ratio that compares the number of hours he goes to school to the number of hours he in not at school. b) Write this ratio as fraction, decimal and percent.
Day 4	Oranges are on sale for $0.35 each. Juan wants to buy 15 oranges. He tells his Mom the oranges will cost approximately $4.50. a) Does Juan's estimate make sense? Justify your response. b) Explain what Juan might have done to get his estimated cost of $4.50.
Day 5	John ate $\frac{3}{4}$ of his pizza, and Sharon ate $\frac{7}{12}$ of her pizza. The pizzas were the same size. a) Who ate more pizza? How much more did they eat? Justify your response. b) Draw a diagram to support your response.

Sixth Grade Spiraling Review
Week 2 of Third Six Weeks

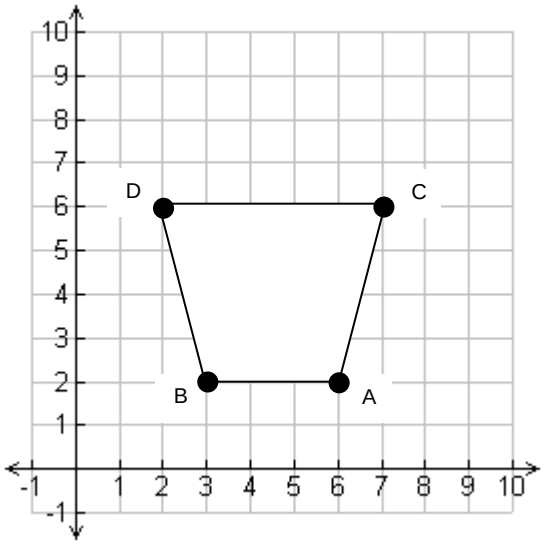
Note: Record all work in your math journal.

Day 1	Brooke is on her way to the public library. Her house is located at point (4, 3). The library is located at point ($5\frac{1}{2}$, 7). After Brooke checks out a book at the library, she walks to the store to get her mother some milk, located at point ($4\frac{1}{2}$, $5\frac{1}{2}$). After this, she returns home. Use the coordinate grid provided to locate and name each destination on Brooke's daily trip. 
Day 2	Anthony ran $\frac{8}{3}$ miles on Saturday for his fitness training. a) Write the number of miles he ran as a decimal. b) Explain the process you used to change the number of miles to a decimal. c) Draw a number line and indicate where this decimal would be most reasonably placed. d) Describe how you located this decimal on the number line.
Day 3	Mr. Green noticed that 56% of his students have returned the required form for the school dance. a) Write the decimal that represents the percent of his students who have **NOT** returned the required form. b) Draw a number line and indicate the location of the decimal that represents the students who did **NOT** return the required form. c) Describe how you located this decimal on the number line.

Sixth Grade Spiraling Review
Week 2 of Third Six Weeks (cont.)

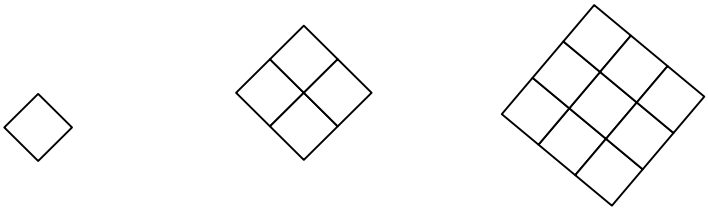
Day 4

A trapezoid is shown on the grid below:



a) List the ordered pairs of the vertices on the trapezoid above
b) Identify the attributes of the x and y values in Quadrant I.

Day 5



Stage 1
Perimeter = 4

Stage 2
Perimeter = 8

Stage 3
Perimeter = 12

This diagram represents a relationship between the stages and their perimeters.

Stage	Process	Perimeter
1		
2		
3		
4		

a) Use the data from the diagram to complete the table
b) Formulate an expression from the data representing the relationship between the stage and the perimeter.
c) What would the perimeter be at Stage 10?

Sixth Grade Spiraling Review
Week 3 of Third Six Weeks

Note: Record all work in your math journal.

Day 1

Use the rule: **6n – 4**

a) Write the first five terms for the sequence that follows the rule.
b) What would the value of the 10th term be?

Day 2

The table shows David's age and Victoria's age over five consecutive years.

Victoria	David
3	6
4	8
5	10
6	12
7	14
n	

a) Write an expression that would represent David's age in terms of Maria's age.

Day 3

Beth drives her car to and from work each day. Her house is 6 kilometers from her workplace.

a) Create a table of value that describes the total number of kilometers, *k*, Beth drives each day as the output in terms of each day, *d*, as the input.
b) Explain if this relationship is proportional or not.

Day 4

Coach Hernandez is buying new volleyball uniforms for her players. The list shows the prices for uniforms at two different stores.

The Sports Edge: 2 uniforms for $44
Sport Shop: 3 uniforms for $60

a) Write an equation to find the total cost, *t*, for uniforms, *f*, at each shop.
b) If he buys 6 uniforms, what would be the cost at each store?
c) Coach Hernandez decides to purchase 10 uniforms, which store should she buy from?

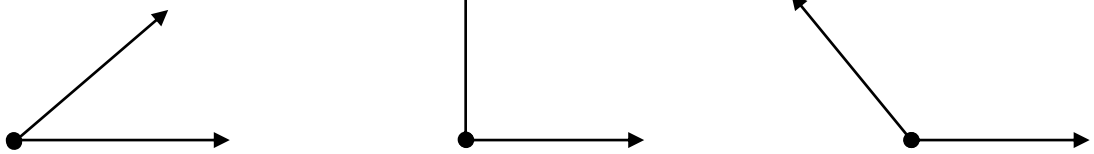
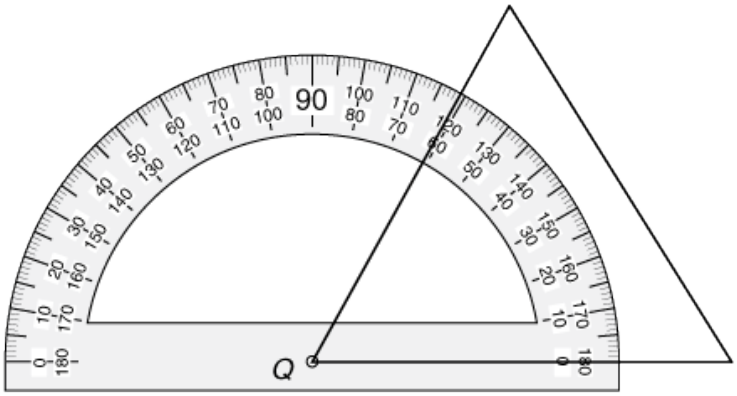
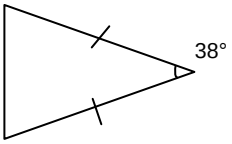
Day 5

Jacob and Angela are starting a dog-walking business. They charge $12 for membership and $3 .50 per hour of dog-walking.

a) Write an equation using the variable *h*, hours, to illustrate how much they would charge, *c*, a customer.

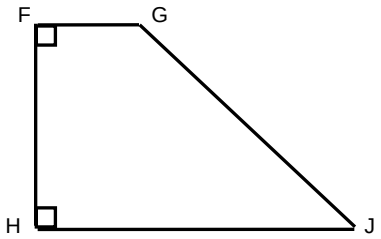
Sixth Grade Spiraling Review
Week 4 of Third Six Weeks

Note: Record all work in your math journal.

Day 1	Angle *A* Angle *B* Angle *C*  a) How would you classify each of the three angles? b) What are the characteristics of Angle A? c) What are the characteristics of Angle C?
Day 2	 a) What is the measure of Angle Q to the nearest degree? b) How would you classify Angle Q? c) Angle Q is how many degrees shy of being classified as a right angle?
Day 3	Marco and his mother went shopping to buy him some new shirts on the tax free weekend. Marco saw a sale sign on his favorite shirts that said 3 for $45. Marco's mother gave him $75. a) How many shirts can Marco buy? Justify your response. b) Draw a diagram to support your response.
Day 4	 a) What are the measurements of the two unknown angles? b) What is the angle measured at 38° classified as? c) Using angle measures, classify this triangle as acute, obtuse or right and isosceles, scalene, or equilateral.
Day 5	Ms. Seifert is choosing a new phone plan. The company charges $20 a month and $0.03 per minute used. a) Write an equation that can be used to find, *t*, the monthly total for, *m*, minutes.

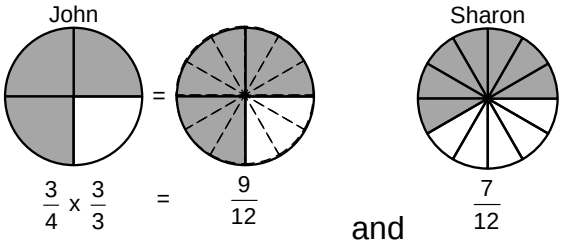
Sixth Grade Spiraling Review
Week 5 of Third Six Weeks

Note: Record all work in your math journal.

Day 1	Use Trapezoid FGHJ for the following questions:  a) Which of the following angles in the figure are right angles? b) Which angle(s) could be considered obtuse? c) What are the characteristics of an obtuse angle? d) Are there any acute angles in the figure, if so, which angle?
Day 2	Juanita measured the height of her basketball goal. She recorded 12 feet for the height. a) How would she record this height in yards? Explain the process. b) How would she record this height in inches? Explain the process.
Day 3	The triangle below is scalene.  a) Describe the characteristics of angles in $\triangle ABC$. b) Classify Angle *A* and Angle *C*.
Day 4	Mary needed to simplify the expression: 23 + (16 ─ 9) x 4 ÷ 2 on her test. She calculated 37 for her solution. a) Did Mary simplify the expression correctly? If not, what is the correct solution? b) Explain the process you used to simplify this expression.
Day 5	 a) What is the measurement of Angle L? b) What is the sum of the internal angles in this quadrilateral? c) Identify three characteristics of this rectangle.

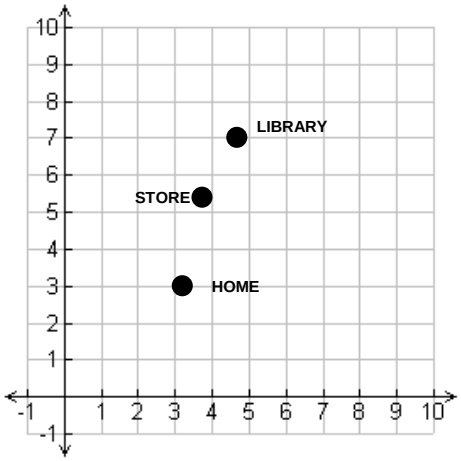
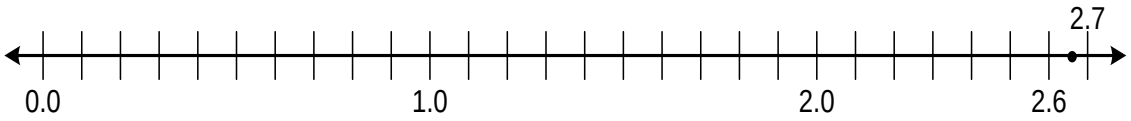
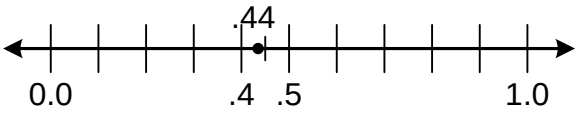
Sixth Grade Spiraling Review
Third Six Weeks
Answer Keys (pp. 1 of 4)

Week 1 Answer Key: ***Process may vary.***

Day 1	*Answers will vary depending on the cards drawn.*
Day 2	a) 15 groups: Factors of 60: 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60 Factors of 45: 1, 3, 5, 9, 15, 45 Factors of 30: 1, 2, 3, 5, 6, 10, 15, 30 As she divides up the markers, pens, and highlighters equally, there will be 15 groups with 4 markers, 3 pencils, and 2 highlighters in each group. b) Greatest Common Factor
Day 3	a) 8 hours in school to 16 hours not in school OR 8 hours in school; 16 hours not in school OR $\frac{8}{16} = \frac{\text{hours in school}}{\text{hours not in school}}$ b) $\frac{8}{16} = \frac{1}{2}$, 0.5, and 50%
Day 4	a) No, the approximation is low. At \$0.35 per orange, 10 oranges would be \$3.50 and 5 oranges would cost half of \$3.50 which is \$1.75 ➔ 15 oranges cost \$3.50 + \$1.75 = \$5.25. b) He might have calculated the cost by using \$0.30 instead of \$0.35 per orange ➔ 10 oranges would be \$3.00 and 5 oranges would be half of \$3.00 which is \$1.50 ➔ 15 oranges would cost \$3.00 + \$1.50 = \$4.50.
Day 5	a) John: $\frac{3}{4} \times \frac{3}{3} = \frac{9}{12}$; $\frac{9}{12} > \frac{7}{12}$; $\frac{3}{4} - \frac{7}{12} = \frac{9}{12} - \frac{7}{12} = \frac{2}{12} \div \frac{2}{2} = \frac{1}{6}$ b)  $\frac{3}{4} \times \frac{3}{3} = \frac{9}{12}$ and $\frac{7}{12}$

Sixth Grade Spiraling Review
Third Six Weeks
Answer Keys (pp. 2 of 4)

Week 2 Answer Key: ***Process may vary.***

Day 1	
Day 2	Anthony ran $\frac{8}{3}$ miles on Saturday for his fitness training. a) $\frac{8}{3} = 2.\overline{6}$ b) Calculated the quotient for 8 ÷ 3 and wrote the remainder as a repeating decimal. c)  d) $2.\overline{6}$ is between 2 and 3 and greater than 2.5 and a little greater than 2.6.
Day 3	a) Returned form: 56% = 0.56 ➔ Did not return form: 1.00 ─ 0.56 = 0.44. b)  c) 0.44 is a little less than halfway between 0.4 and 0.5. 0.45 is halfway between 0.4 and 0.5. 0.44 is a little less than 0.45.
Day 4	a) *A*(6,2) *B*(3,2) *C*(7,6) *D*(2,6) b) x values = positive y values = positive

Week 2 Answer Key (cont.): ***Process may vary.***

Day 5

a)

Stage	Process	Perimeter
1	1 • 4	4
2	2 • 4	8
3	3 • 4	12
4	4 • 4	16

b) $4n$
c) perimeter = 40 at Stage 10

Week 3 Answer Key: ***Process may vary.***

Day 1

a) 6(1) – 4= 2; 6(2) – 4 = 8; 6(3) – 4 = 14; 6(4) – 4 = 20; 6(5) – 4 = 26
2, 8, 14, 20, 26
b) 6(10) – 4 = 56
56

Day 2

a) $2n$

Day 3

a)

Day	Process	Kilometers
0	0 • 12	0
1	1 • 12	12
2	2 • 12	24
3	3 • 12	36
4	4 • 12	48

b) Proportional; there is a constant ratio and the table contains the point (0,0).

Day 4

a) Sports Edge: $2x = \$44$
Sport Shop: $3x = \$60$

b) Sports Edge: $\frac{\text{cost}}{\textit{uniforms}} = \frac{\$44}{2} = \frac{\$22}{1} = \frac{\$132}{6}$ Sport Shop: $\frac{\text{cost}}{\textit{uniforms}} = \frac{\$60}{3} = \frac{\$20}{1} = \frac{\$120}{6}$

c) Sports Edge: $\frac{\$22}{1} = \frac{\$220}{10}$; Sport Shop: $\frac{\$20}{1} = \frac{\$200}{10}$
The Sport Shop would be the better buy

Day 5

a) $c = 12 + 3.5h$

Sixth Grade Spiraling Review
Third Six Weeks
Answer Keys (pp. 4 of 4)

Week 4 Answer Key: ***Process may vary.***

Day 1	a) Angle *A* = acute Angle *B* = right Angle *C* = obtuse b) An acute angle has a measurement of more than 0° and less than 90°. c) An obtuse angle has a measurement of more than 90° and less than 180°.
Day 2	a) 61° d) An acute angle e) 90° - 61° = 29°
Day 3	a) 5 shirts ➔ cost of 1 shirt = \$45 ÷ 3 = \$15. \$75 ÷ \$15 = 5 shirts ➔ 5 x \$15 = \$75 b)

3 shirts for \$45			3 shirts for \$45		
5 shirts for \$75 = 5 x \$15					
\$15	\$15	\$15	\$15	\$15	\$15

Day 4	a) $\frac{180-38}{2} = \frac{142}{2} = 71°$ b) Acute c) This is an acute isosceles triangle
Day 5	a) \$20 + .03*m* = *t*

Week 5 Answer Key: ***Process may vary.***

Day 1	a) Angle *F* and Angle *H* are both right angles and congruent b) Angle *G* c) Obtuse angle has an angle measurement of more than 90° but less than 180° d) Angle *J*
Day 2	a) 4 yards, you divide 12 by 3 b) 144 inches, you multiply 12 by 12
Day 3	a) △*ABC* is obtuse scalene b) Angle *A* = obtuse Angle *C* = acute
Day 4	a) Yes b) Follow correct order of operations: (—); x; ÷; + 23 + (16 — 9) x 4 ÷ 2 = 23 + 7 x 4 ÷ 2 = 23 + 28 ÷ 2 = 23 + 14 = 37
Day 5	a) 90° b) 360° c) Possible answers: Both pairs of opposite sides are parallel Both pairs of opposite sides are congruent All angles are 90° Both pairs of opposite angles are congruent

Spiraling Review Cards

.	1	2	3
4	5	6	7
8	9	0	