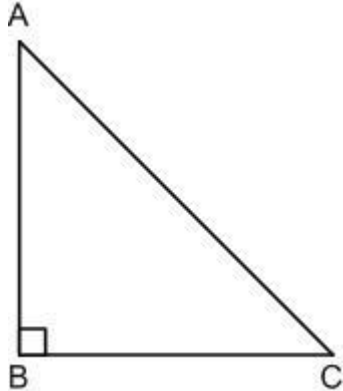


Sixth Grade Spirling Review

Week 1 of Four Six Weeks

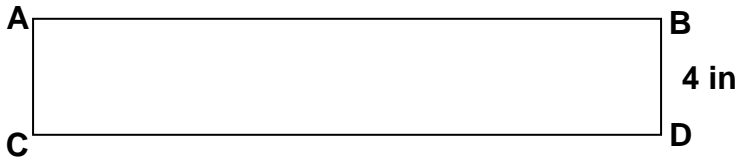
Note: Record all work in your math journal.

Day 1	<p>Betty Jo looks at the clock in her room. She realizes she has 15 minutes until her 3:00 practice is scheduled to start.</p> <p>a) What time is on Betty Jo's clock? b) What type of angle is made by the hands of the clock, when practice starts? c) Name another time where the hands will create the same angle.</p>
Day 2	<p>Mary went to her neighborhood park. She said it was shaped like the diagram below.</p> <p>a) Classify the shape. b) If the two acute angles are congruent, what would be the measure of each angle in the shape? c) Explain the process you used to solve.</p> <div style="text-align: right;">  </div>
Day 3	<p>Explain the mathematical processes needed to solve the following conversions:</p> <p>a) kilometers to meters b) liters to kiloliters c) centigrams to milligrams d) deciliters to hectoliters</p>
Day 4	<p>Jason went to the store to buy a soda. He saw the following sizes, 6 pints, 40 fluid ounces, 4 quarts, and 2 cups.</p> <p>a) List the soda sizes in order from greatest to least. b) Explain the process you used to solve the problem.</p>
Day 5	<p>Ralph bought a new sports car that can hold 120 quarts of gasoline. The salesman told him he would average 18 miles per gallon.</p> <p>a) How many gallons of gas will Ralph's car hold? Explain your answer. b) How far can he drive on 1 tank of gas? Explain your answer.</p>

Sixth Grade Spiraling Review

Week 2 of Fourth Six Weeks

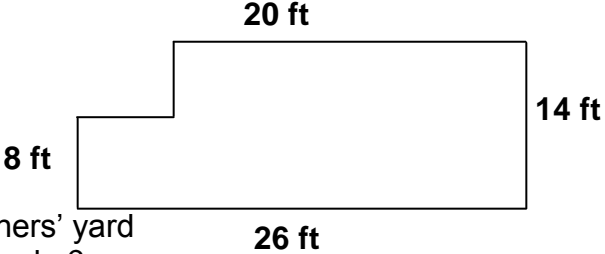
Note: Record all work in your math journal.

Day 1	<p>Sara is helping her mother sew a standard sized flag with dimensions of 36 inches by 48 inches.</p> <p>a) Identify the polygon that Sara help her mother to make? b) What are the characteristics of this shape? c) What is the perimeter of the flag? d) What is the area of the flag?</p>																									
Day 2	<p>Complete the following table of values for a given rectangle:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">Dimensions</th> <th style="padding: 5px;">Process (Perimeter)</th> <th style="padding: 5px;">Perimeter</th> <th style="padding: 5px;">Process (Area)</th> <th style="padding: 5px;">Area</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">4 by 5</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">7 by 8</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">12 by 11</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">32 by 14</td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> </tbody> </table>	Dimensions	Process (Perimeter)	Perimeter	Process (Area)	Area	4 by 5					7 by 8					12 by 11					32 by 14				
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Day 3	<div style="text-align: center; margin-bottom: 20px;">  </div> <p>a) If the length of \overline{AB} is three times the measurement of \overline{BD}, what is the length of \overline{AB}? b) What is the perimeter of the given rectangle? c) What is the area of the given rectangle?</p>																									
Day 4	<p>The area of a parallelogram is 56 in^2 and the base is 7 in.</p> <p>a) Describe the attributes of a parallelogram. b) What would be the height of this parallelogram?</p>																									
Day 5	<p>A bird tries to fly between some tree branches that form a triangular space 6 meters high and 4 meters wide at the base.</p> <p>a) How large is the space created by the branches of the tree?</p>																									

Sixth Grade Spiraling Review

Week 3 of Fourth Six Weeks

Note: Record all work in your math journal.

Day 1	<p>Plot the following ordered pairs on a coordinate plane: $(2,1)$, $(5,4)$, $(2,4)$, $(13,1)$</p> <p>a) Identify and describe the polygon created when you connect these vertices? b) Approximate the area of this figure.</p>																												
Day 2	<p>Mr. Mathers has asked his neighbor, Joseph, to rake his yard below. He will pay Joseph \$2 for every hour he works. Joseph can rake at a rate of 12 square feet per minute.</p> <div style="text-align: center;">  </div> <p>a) Calculate the perimeter of Mr. Mathers' yard b) What is the area that Joseph must rake? c) Approximately how long will it take Joseph to rake the yard? d) About how much money should Joseph earn if he rakes Mr. Mathers' yard?</p>																												
Day 3	<p>Complete the following table of values for a given circle:</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 20%;">Radius</th> <th style="width: 20%;">Process (Circumference)</th> <th style="width: 20%;">Circumference</th> <th style="width: 20%;">Process (Area)</th> <th style="width: 20%;">Area</th> </tr> </thead> <tbody> <tr> <td>2 in.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3 in.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>8 in.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>12 in.</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Radius	Process (Circumference)	Circumference	Process (Area)	Area	2 in.					3 in.					8 in.					12 in.				
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Day 4	<p>Edith is buying fabric, at \$3 per yard, to decorate her lamp shade. She plans to hot glue the length of the fabric around the outside of the shade.</p> <p>a) If the lamp shade has a radius of 14 inches, how much fabric should she buy? b) How much money will Edith spend on fabric?</p>																												
Day 5	<p>Mr. Finan just completed his work on a circular table for his living room.</p> <p>a) What is the circumference of the table if the diameter is 4 feet? b) Explain the mathematical process needed to solve for the formula for area of a circle. c) What is the approximate area of the table?</p>																												

Sixth Grade Spiraling Review

Week 4 of Fourth Six Weeks

Note: Record all work in your math journal.

Day 1	<p>Cody is conducting an experiment in his science class today and uses a triple-beam balance to measure the mass various objects from around the room.</p> <p>a) What is an appropriate unit for Cody to use when measuring mass? b) If an eraser is 3.5 grams, what is this measure in milligrams? c) Cody's desk is 22 kilograms, what is this measure in decigrams?</p>
Day 2	<p>Alison is making 4 gallons of punch for her friend's upcoming birthday party.</p> <p>a) How many pints is this? b) How many cups is this? c) How many fluid ounces is this?</p>
Day 3	<p>Identify a unit from both the metric and customary systems that would be the most appropriate to use in the given situation:</p> <p>a) The length of your driveway to the bus stop b) The width of your classroom c) The length of your desk d) The height of the trashcan e) The length of a straw</p>
Day 4	<p>The town of Tower, Minnesota has some of the lowest temperatures on record. On one day, the temperature was 12°F at 6:30 am. By 1:45 pm, the temperature had risen 19 degrees.</p> <p>a) How much time had elapsed? b) What was the temperature at 1:45 pm?</p>
Day 5	<p>Over three consecutive days in December, Amarillo received $1\frac{1}{2}$, 2.75, and 4 inches of snow.</p> <p>a) How many total inches of snow did Amarillo receive over the three days? b) One day the high temperature was 33°F at 5:10 pm, what was the temperature at 7:40 pm if the temperature decreased two degrees every half hour?</p>

Sixth Grade Spiraling Review

Week 5 of Fourth Six Weeks

Note: Record all work in your math journal.

Day 1	<p>Marcus has a four-sided figure and tells his friend that his it is a parallelogram with four right angles and four congruent sides. His friend says his figure could be a rhombus.</p> <p>a) Is his friend correct? Explain. b) Is there another name for the figure? If so, what is it? c) Use geometric vocabulary and definitions to justify your reasoning.</p>
Day 2	<p>Mary Jo works at the local pizza restaurant. Her boss told her that each pizza should have 12 pieces of pepperoni and 4 mushrooms.</p> <p>a) What is the ratio of mushrooms to pepperoni on a pizza? b) If she has 108 pieces of pepperoni, how many pizzas can she make? c) If she is making 12 pizzas, how many mushrooms will she need?</p>
Day 3	<p>Dillon is creating a diorama using a shoebox. The dimensions of the box are 8 inches by 12 inches by 16 inches.</p> <p>a) What is the volume of the shoebox in cubic inches?</p>
Day 4	<p>If the volume of a cube is 512 in^3.</p> <p>a) What are the measures of the length, width, and height?</p>
Day 5	<p>Jesse is buying his girlfriend a new jewelry box. The height is 4 inches, the width is 6 inches, and the length is 10 inches.</p> <p>a) What is the perimeter of the top of the jewelry box? b) What is the area of the top of the jewelry box? c) What is the volume of the jewelry box?</p>

Sixth Grade Spiraling Review

Fourth Six Weeks

Answer Keys


(pp. 1 of 3)

Week 1 Answer Key: *Processes may vary.*

Day 1	a) 2:45 b) Right angle or 90° c) Answers may vary. Sample: 9:00
Day 2	a) A right triangle b) 45 degrees, 45 degrees, 90 degrees c) $180 - 90 = 90$ and $90 \div 2 = 45$
Day 3	a) Multiply by 1000 b) Divide by 1000 c) Multiply by 1000 d) Divide by 1000
Day 4	a) 4 quarts, 6 pints, 40 fluid ounces, 2 cups b) The students need to convert all amounts to the same unit of measure. <i>Answers will vary.</i> 4 quarts = 16 cups, 6 pints = 12 cups, 40 Fluid Ounces = 5 cups, 2 cups = 2 cups
Day 5	a) 30 gallons. <i>Answers may vary.</i> b) 540 miles; $18 \times 30 = 540$. <i>Answers may vary.</i>

Week 2 Answer Key: *Processes may vary.*

Day 1	a) A rectangle b) 4 sides; opposite sides are parallel and have equal length c) 168 in. d) 1,728 in. ²				
Day 2	Dimensions	Process (Perimeter)	Perimeter	Process (Area)	Area
	4 by 5	$2(4) + 2(5)$	18	$4(5)$	20
	7 by 8	$2(7) + 2(8)$	20	$7(8)$	56
	12 by 11	$2(11) + 2(12)$	46	$12(11)$	132
	32 by 14	$2(32) + 2(14)$	92	$32(14)$	448
Day 3	a) 12 inches b) 32 inches c) 48 in. ²				
Day 4	a) 4 sides, opposite are sides parallel b) 8 inches				
Day 5	a) $\frac{6(4)}{2} = 12 \text{ m}^2$				



Sixth Grade Spiraling Review
Fourth Six Weeks
Answer Keys
 (pp. 2 of 3)

Week 3 Answer Key: *Processes may vary.*

Day 1	a) Trapezoid b) $24 u^2$				
Day 2	a) 80 ft. b) 328 ft.^2 c) 27 hours d) \$54.00				
Day 3	Radius	Process (Circumference)	Circumference	Process (Area)	Area
	2 in.	$2(2) \pi$	$\approx 12.57 \text{ in.}$	$2^2(\pi)$	$\approx 12.57 \text{ in.}^2$
	3 in.	$3(2) \pi$	$\approx 18.85 \text{ in.}$	$3^2(\pi)$	$\approx 28.27 \text{ in.}^2$
	8 in.	$8(2) \pi$	$\approx 50.27 \text{ in.}$	$8^2(\pi)$	$\approx 201.06 \text{ in.}^2$
	12 in.	$12(2) \pi$	$\approx 75.39 \text{ in.}$	$12^2(\pi)$	$\approx 452.39 \text{ in.}^2$
Day 4	a) ≈ 2.5 yards b) $\approx \$7.50$				
Day 5	a) ≈ 12 ft b) You must first square your radius, and then multiply by pi. c) $\approx 12 \text{ ft}^2$				

Week 4 Answer Key: *Processes may vary.*

Day 1	a) Grams b) 3500 mg c) 220,000 decigrams				
Day 2	a) 32 pints b) 64 cups c) 512 fluid ounces				
Day 3	<i>Answers will vary</i> a) meters, yards b) meters, feet, yards c) centimeters, inches d) centimeters, inches e) millimeters, inches				
Day 4	a) 7 hours 15 minutes b) 31°F				
Day 5	a) $8\frac{1}{4}$ inches b) 26°F				

Sixth Grade  Spiraling Review
Fourth Six Weeks
Answer Keys
(pp. 3 of 3)

Week 5 Answer Key: *Process may vary.*

Day 1	a) Yes, a rhombus by definition has four congruent sides b) Square, a square has four right angles and four congruent sides c) <i>Answers will vary.</i>
Day 2	a) 1 to 3 b) 9 pizzas c) 48 mushrooms
Day 3	a) 1,536 inches ³
Day 4	a) 8 inches
Day 5	a) 32 inches b) 60 square inches c) 240 cubic inches