

## Grade 7: Patterns

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							M								
<b>District Objective</b> *1. Identify a digit's place value in a number. 2. Find equivalent values of coins.  <i>*Critical to success in next course.</i>												<b>PASS Process Standard</b>		<b>Quarter I</b> <b>No. Days</b> 1	
<b>" ITBS " CRT ! EXPLORE " EOI ! PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will...													<b>NCTM Standard</b> Pg. 214		
<b>Text Correlation</b> Pgs. 48-50			<b>Rating</b> 2		<b>Additional Resources</b> Estimating Large Numbers Activity; Reinforcement Lesson in Place Value Activity; Calculating Challenges Activity; <a href="http://www.aaamath.com/mny313-conv-dimes-nickels-pennies.html">http://www.aaamath.com/mny313-conv-dimes-nickels-pennies.html</a> <a href="http://www.col-ed.org/cur/math/math16.txt">www.col-ed.org/cur/math/math16.txt</a> <a href="http://www.suremath.com/suremath/lessonPlans/lesson1.html">www.suremath.com/suremath/lessonPlans/lesson1.html</a>										
<b>Assessment</b>  1. What is the place value of the 3 in 18,435,657? (a) Hundreds      (b) Ten-thousands      (c) Thousands      (d) Millions  2. Eight nickels, five pennies, and three quarters would equal how many dimes?															

## Grade 7: Patterns

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							M								
<b>District Objective</b> *Order whole numbers and decimal numbers.  <i>*Critical to success in next course.</i>												<b>PASS Process Standard</b>		<b>Quarter I</b> <b>No. Days</b> 1	
<b>" ITBS " CRT ! EXPLORE " EOI ! PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will...												<b>NCTM Standard</b> Pg. 214			
<b>Text Correlation</b> Pgs. 48-50						<b>Rating</b> 2		<b>Additional Resources</b> <a href="http://www.aaamath.com">www.aaamath.com</a> "Ordering Numbers"							
<b>Assessment</b>  List in order from smallest to largest:  .78, 8, 7, 7.8, .8															

## Grade 7: Number Sense/Computation

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							M								
<b>District Objective</b> *Apply knowledge of place value and rounding to the nearest tenth, hundredth, thousandth, and ten-thousandth to make reasonable estimates of decimal numbers.  <i>*Critical to success in next course.</i>												<b>PASS Process Standard</b>	<b>Quarter I</b> <b>No. Days 1</b>		
<b>" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will...												<b>NCTM Standard</b> Pg. 214			
<b>Text Correlation</b> Pgs. 48-53 Cooperative Learning Activity 2-1							<b>Rating</b> 1	<b>Additional Resources</b> <a href="http://www.scienceacademy.com/B1/round.htm">www.scienceacademy.com/B1/round.htm</a> <a href="http://www.kindermagic.com/real_math/md_dec.html">www.kindermagic.com/real_math/md_dec.html</a> <a href="http://funbrain.com">funbrain.com</a> "Operation Order"							
<b>Assessment</b>  1. Round each number to the nearest tens place.  (a) 23        (b) 45        (c) 672        (d) 486   2. Round .254893 to the nearest hundredth, thousandth, and ten-thousandth.															

# Grade 7: Measurement

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							
<b>District Objective</b> *Compute distances using metric measurements.  <i>*Critical to success in next course.</i>												<b>PASS Process Standard</b>		<b>Quarter I</b> <b>No. Days</b> 2	
<b>" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will... <b>IV. Measurement - Applications, Metric</b> B. Compute metric measurements of combined units using appropriate methods.												<b>NCTM Standard</b> Pg. 240			
<b>Text Correlation</b> Pgs. 78-80 Lesson 2-9						<b>Rating</b> 3		<b>Additional Resources</b> Activity Card 2-9 Measurement Activity							
<b>Assessment</b>  1. What is the perimeter, in meters of a square with sides of 2.5 m?  (a) 10 m      (b) 8 m      (c) 5 m      (d) 9 m  2.      4 km 7 m 9 cm + <u>3 km 5 m 2 cm</u>															

## Grade 7: Measurement

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							E	M							
<b>District Objective</b> Perform common customary and metric conversions (e.g., inches to feet, or hours to minutes, or centimeters to meters).												<b>PASS Process Standard</b>	<b>Quarter I</b> <b>No. Days</b> 1		
<b>" ITBS ! CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will... <b>IV. Measurement - Applications, Metric</b> A. Compare and convert a given measurement to another metric measurement unit (e.g., centimeters to meters, kilograms to grams, milliliters to liters).												<b>NCTM Standard</b> Pg. 240			
<b>Text Correlation</b> Pgs. 78-80 Pgs. 238-240							<b>Rating</b> 1	<b>Additional Resources</b> Dive into Math Activity; Football Frenzy Activity; Metrics Scavenger Hunt Activity							
<b>Assessment</b>  1. How many $\frac{3}{4}$ cup servings are contained in 6 cups of pudding?  (a) 8                      (b) $6\frac{3}{4}$ (c) $5\frac{1}{4}$ (d) $4\frac{1}{2}$  2. George is 75 inches tall. Convert his height to feet and inches.															

## Grade 7: Measurement

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							
<b>District Objective</b> Choose an appropriate unit of measure and then estimate and find the measurement of given objects.												<b>PASS Process Standard</b>		<b>Quarter I</b> <b>No. Days</b> 2	
<b>" ITBS ! CRT " EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will... <b>IV. Measurement - Applications, Metric</b> C. Select and use appropriate tools for metric measurements in practical applications and understand measurement will only be precise to one-half of the unit used for measurement.												<b>NCTM Standard</b> Pg. 240			
<b>Text Correlation</b> Pgs. 78-80							<b>Rating</b> 1		<b>Additional Resources</b> Metrics Scavenger Hunt Activity Find the Bingo Activity						
<b>Assessment</b>  1. A blue whale is about 30 m long. Which would be the most appropriate scale for a 15-cm drawing of a blue whale? (a) 1 cm = 2 m      (b) 10 cm = 2 m      (c) 1 cm = 100 m      (d) 10 cm = 0.1 m  2. The distance from Oklahoma City to Norman is best measured in (a) feet      (b) yards      (c) miles.															

## Grade 7: Measurement

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							
<b>District Objective</b> Solve estimation problems using measurement data.												<b>PASS Process Standard</b>		<b>Quarter I</b> <b>No. Days</b> 1	
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>IV. Measurement - Applications, Metric</b> D. Give a reasonable <b>estimate</b> of measurement using the appropriate metric unit (e.g., 30° C is the temperature on a hot day; a meter is approximately the height of a door knob).													<b>NCTM Standard</b> Pg. 240		
<b>Text Correlation</b> Pgs. 78-80				<b>Rating</b> 3		<b>Additional Resources</b> Teacher's Guide - Motivating the lesson-perhaps extend to a scavenger hunt. Measurement Activity									
<b>Assessment</b>  1. Estimate the number of meters in 2,573 feet.  2. About how many meters tall is the classroom door?															

## Grade 7: Number Sense

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							M								
<b>District Objective</b> 1. Apply estimation to problem solving of real life situations and determine the reasonableness of exact answers. 2. Solve multistep problems in the context of money.												<b>PASS Process Standard</b>		<b>Quarter I No. Days 1</b>	
<b>" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will...													<b>NCTM Standard</b> Pgs. 256, 262, 268, 274		
<b>Text Correlation</b> Pgs. 8-16							<b>Rating</b> 1		<b>Additional Resources</b> First Quarter Math Project; Predictions: Individual and Team Activity						
<b>Assessment</b>  Bill, a wise shopper, lives in a town where sales tax is not charged on groceries. He can buy milk for \$2.05 per gallon at the Fast Food Store or he can buy it at the Mega Mart for \$2.13 per gallon. By participating in the Mega Mart Free Milk Club, Bill gets 1 gallon of milk free for every 10 gallons he buys at the regular price. If Bill estimates that he uses about 55 gallons of milk a year, then Bill will:															
(a) save more than \$5 per year if he buys milk at the Fast Food Store. (b) save some, but less than \$5 per year, if he buys milk at the Fast Food Store. * (c) save more than \$5 per year if he participates in the Mega Mart Free Milk Club. (d) save some, but less than \$5 per year, if he participates in the Mega Mart Free Milk Club. (e) pay the same at both places for 55 gallons of milk.															

## Grade 7: Number Sense /Computation

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							M								
<b>District Objective</b> *1. Perform one-operation computation with whole numbers and decimals. *2. Solve problems in one or two steps using whole numbers. *3. Solve one-step and two-step arithmetic problems that have decimal numbers.  <i>*Critical to success in next course.</i>												<b>PASS Process Standard</b>	<b>Quarter I</b> <b>No. Days 2</b>		
<b>" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will...												<b>NCTM Standard</b> Pg. 214			
<b>Text Correlation</b> Pgs. 58-63 Pgs. 71-77						<b>Rating</b> 1		<b>Additional Resources</b> Hands-On Equations Kit							
<b>Assessment</b>  1. Alex has \$2.00 After she buys 4 pencils for 10¢ each and a notebook, she has only 20¢ left. How much did she pay for the notebook? (Note: tax is included in these prices.)  (a) \$1.40      (b) \$1.50      (c) \$1.60      (d) \$1.70      (e) \$1.80  2. $706 \times 65 = ?$  (a) 2,650      (b) 45,590      (c) 56,980      (d) 4,650  3. $2.63 + 9.6$  (a) 1.54      (b) 10.06      (c) 11.59      (d) 12.23															

## Grade 7: Number Sense /Computation

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							E	M							
<b>District Objective</b> *Solve multistep arithmetic problems that involve planning or drawing conclusions based on given information.  *Critical to success in next course.												<b>PASS Process Standard</b>		<b>Quarter I</b> <b>No. Days</b> 1	
<b>" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will...												<b>NCTM Standard</b> Pgs. 214, 222			
<b>Text Correlation</b> Pgs. 14-16						<b>Rating</b> 3		<b>Additional Resources</b> Making Things Simpler; Hands-On Equations Kit; Free Standing Structure Activity <a href="http://www.col-ed.org/cur/math/math37.txt">www.col-ed.org/cur/math/math37.txt</a> Variables Activity							
<b>Assessment</b>  Sally and Peter have a lawn-mowing business. They earn \$30 for a large yard, \$21 for a medium-size yard, and \$15 for a small yard. If they mow 8 yards and there are at least 2 yards of each size, what is the maximum amount of money they can earn?  (a) \$66      (b) \$132      (c) \$176      *(d) \$192      (e) \$240															

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K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							E	M							
<b>District Objective</b> *Identify, explain, and apply inverse and identity properties.  *Critical to success in next course.												<b>PASS Process Standard</b>		<b>Quarter I</b> <b>No. Days</b> 2	
<b>" ITBS ! CRT " EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will... <b>I. Patterns: Algebraic Expressions and Equations</b> <b>C.</b> Identify, explain, and apply the commutative, associative, distributive, inverse and identity <b>properties</b> (e.g., $n + 0 = n$ , $2(x + 3) = 2x + 6$ ).												<b>NCTM Standard</b> Pg. 214			
<b>Text Correlation</b> Pgs. 204-206							<b>Rating</b> 1		<b>Additional Resources</b> <a href="http://www.4mathstuff.com">www.4mathstuff.com</a> (Properties of Integers Activity)						
<b>Assessment</b>  Identify the properties demonstrated by each statement.  (a) $5 + -5 = 0$ (b) $5 + 0 = 5$ (c) $5 \times 1 = 5$ (d) $\frac{3}{4} \times \frac{4}{3} = 1$															

## Grade 7: Patterns

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
						E	M								

**District Objective**

Identify, explain, and apply the commutative, associative, and distributive properties.

**PASS Process Standard**

**Quarter  
I  
No. Days  
2**

" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP

**PASS Objective**

The student will...

**I. Patterns: Algebraic Expressions and Equations**

C. Identify, explain, and apply the commutative, associative, distributive, inverse and identity **properties** (e.g.,  $n + 0 = n$ ,  $2(x + 3) = 2x + 6$ ).

**NCTM  
Standard  
Pg. 214**

**Text Correlation**

Pgs. 204-206

**Rating**

1

**Additional Resources**

Teaching Algebraic Thinking Through Hands-On Activities;  
[www.gomath.com](http://www.gomath.com) Go to: algebra solutions/  
algebra/associative and distributive property

**Assessment**

1. Identify the property demonstrated in each statement - commutative, associative, or distributive:

(a)  $\frac{3}{4} \times \frac{1}{2} \times \frac{1}{3} = \frac{3}{4} \times \frac{1}{2} \times \frac{1}{3}$

(b)  $\frac{3}{4} \times \frac{1}{2} + \frac{1}{3} = \frac{3}{4} \times \frac{1}{2} + \frac{1}{3}$

(c)  $\frac{3}{4} + \frac{1}{2} = \frac{1}{2} + \frac{3}{4}$

2. Write an arithmetic sentence that shows the associative property of addition.

## Grade 7: Patterns: Algebraic Expressions and Equations

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	M						
<b>District Objective</b> *Identify an expression or equation that models the context of the problem.  *Critical to success in next course.												<b>PASS Process Standard</b>	<b>Quarter I</b> <b>No. Days</b> 2		
<b>" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will... <b>I. Patterns: Algebraic Expressions and Equations</b> <b>D. Solve simple linear equations (e.g., use <b>properties</b>, graph ordered pairs with paper and pencil, use graphing calculators).</b>												<b>NCTM Standard</b> Pgs. 222, 256, 274			
<b>Text Correlation</b> Pgs. 220-249 Pgs. 259-261							<b>Rating</b> 1	<b>Additional Resources</b> Roller Coaster Math Worksheet; The Mean Spider Dream Mystery Activity							
<b>Assessment</b>  If the expression $(n + 1)$ represents an even integer, which of the following expressions represents the next larger even integer:  <div style="margin-left: 40px;">             (a) <math>n + 2</math>              * (b) <math>n + 3</math>              (c) <math>2n + 1</math>              (d) <math>2(n + 1)</math>              (e) <math>(n + 1)^2</math> </div>															

## Grade 7: Patterns: Algebraic Expressions and Equations

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							I	E	M						
<b>District Objective</b> *1. Compute the value of an expression by substituting whole numbers. *2. Find the value of an expression by substituting decimals for unknown quantities. <i>*Critical to success in next course.</i>												<b>PASS Process Standard</b>		<b>Quarter I</b> <b>No. Days</b> 2	
<b>" ITBS " CRT ! EXPLORE " EOI ! PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will... <b>I. Patterns: Algebraic Expressions and Equations</b> <b>B. Simplify and evaluate algebraic expressions</b> (e.g., if $x = -5$ evaluate $2x$ ).													<b>NCTM Standard</b> Pg. 222		
<b>Text Correlation</b> Pgs. 28-31							<b>Rating</b> 2		<b>Additional Resources</b> <a href="http://www.aaamath.com/g723-evaluate-1variable.html">www.aaamath.com/g723-evaluate-1variable.html</a> <a href="http://www.aaamath.com/g723-evaluate-2variable.html">www.aaamath.com/g723-evaluate-2variable.html</a> <a href="http://www.algebrahelp.com/lessons/simplifying/substitution/">http://www.algebrahelp.com/lessons/simplifying/substitution/</a>						
<b>Assessment</b>  When $x$ is 2 and $y$ is 0, then $6x + 2y = ?$  (a) 4      (b) 12      (c) 14      (d) 24      (e) 82															

## Grade 7: Patterns: Algebraic Expressions and Equations

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							E	M							
<b>District Objective</b> *Evaluate numerical expressions and apply the order of operations.  *Critical to success in next course.												<b>PASS Process Standard</b>		<b>Quarter I</b> <b>No. Days</b> 2	
<b>" ITBS ! CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will... <b>I. Patterns: Algebraic Expressions and Equations</b> <b>F.</b> Apply the <b>order of operations</b> and test calculators to see whether it has been included (e.g., simplify <b>expressions</b> , determine which calculators follow the proper <b>order of operations</b> ).													<b>NCTM Standard</b> Pg. 214		
<b>Text Correlation</b> Pgs. 24-31							<b>Rating</b> 1		<b>Additional Resources</b> Radical Math (math games using cards and dice) Volume VII; Order of Operations Activity Sheet; Write Your Own PEMDAS Story; Simplify Numerical Expressions Activity Sheet						
<b>Assessment</b>  1. $x = 5$ , then $3x + 5x = ?$															
(a) 45 (b) 44 (c) 43 (d) 55															

<b>Grade 7: Patterns: Algebraic Expressions and Equations</b>																
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal	
							E	M								
<b>District Objective</b> Combine two like terms (e.g., $2x + 5x$ ).												<b>PASS Process Standard</b>		<b>Quarter I</b> <b>No. Days</b> 2		
" ITBS " CRT ! EXPLORE " EOI ! PLAN " ACT " AP																
<b>PASS Objective</b> The student will... <b>I. Patterns: Algebraic Expressions and Equations</b> <b>D.</b> Solve simple linear equations (e.g., use <b>properties</b> , graph ordered pairs with paper and pencil, use graphing calculators).														<b>NCTM Standard</b> Pg. 222		
<b>Text Correlation</b> None						<b>Rating</b> 3		<b>Additional Resources</b> Hands-On Equations Kit; Algebra Tiles; <a href="http://algebrahelp.com/lessons/simplifying/combiningliketerms/pg3.htm">algebrahelp.com/lessons/simplifying/combiningliketerms/pg3.htm</a>								

**Assessment**

Solve  $9m + 4m = 26$

**Grade 7: Patterns: Algebraic Expressions and Equations**

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							
<p><b>District Objective</b></p> <ul style="list-style-type: none"> <li>*1. Solve equations in the form <math>x + a = b</math>, where <math>a</math> and <math>b</math> are whole numbers or decimals.</li> <li>*2. Solve simple equations that involve whole numbers (e.g., <math>2x - 6 = 24</math>).</li> <li>*3. Solve simple equations when using decimal numbers. <i>*Critical to success in next course.</i></li> </ul>												<p><b>PASS Process Standard</b></p>		<p><b>Quarter I</b> <b>No. Days</b> 2</p>	
<p>" ITBS ! CRT ! EXPLORE " EOI ! PLAN " ACT " AP</p>															

<b>PASS Objective</b> The student will... <b>I. Patterns: Algebraic Expressions and Equations</b> <b>D.</b> Solve simple linear equations (e.g., use <b>properties</b> , graph ordered pairs with paper and pencil, use graphing calculators).	<b>NCTM Standard</b> Pg. 222
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<b>Text Correlation</b> Pgs. 220-231	<b>Rating</b> 1	<b>Additional Resources</b> Hands-On Equation Kit; Algebra Tiles; <a href="http://www.learningwave.com">www.learningwave.com</a> <a href="http://www.accessone.com/~bbunge/algebra/algebra1-html">www.accessone.com/~bbunge/algebra/algebra1-html</a>
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<b>Assessment</b>  For what value of $x$ is $3x - 6 = 48$ true?  (a) 10 (b) 14 *(c) 18 (d) 22 (e) 24
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## Grade 7: Patterns

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	E	M						

<b>District Objective</b> *1. Identify one-digit factors of a number. *2. Identify prime factors of a number. *3. Identify the Greatest Common Factor and Least Common Multiple of a number.  <i>*Critical to success in next course.</i>	<b>PASS Process Standard</b>	<b>Quarter II</b> <b>No. Days</b> 4
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<b>" ITBS " CRT ! EXPLORE " EOI ! PLAN " ACT " AP</b>
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<b>PASS Objective</b> The student will...	<b>NCTM Standard</b> Pg. 214
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<b>Text Correlation</b> Pgs. 129-163 Mini Lab Pg. 145	<b>Rating</b> 1	<b>Additional Resources</b> Multiples Game Activity
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<p><b>Assessment</b></p> <p>1. What is the greatest whole number that is a factor of both 36 and 40? *(a) 4            (b) 5            (c) 6            (d) 8            (e) 12</p> <p>2. Factor the following into prime numbers. (a) 56            (b) 12            (c) 65</p> <p>3. Find the Greatest Common Factor of the following: (a) 42, 14        (b) 35, 50        (c) 32, 48</p> <p>4. Find the Least Common Multiple of the following: (a) 28, 70        (b) 7, 15            (c) 49, 63</p>
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**Grade 7: Number Sense / Computation (Estimation)**

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							M								

<p><b>District Objective</b> Employ rounding of fractions to less than ½ or greater than ½ to make reasonable estimates of fractional numbers.</p>	<p><b>PASS Process Standard</b></p>	<p><b>Quarter II</b> <b>No. Days</b> 1</p>
<p>" ITBS   " CRT   " EXPLORE   " EOI   " PLAN   " ACT   " AP</p>		

<b>PASS Objective</b> The student will...	<b>NCTM Standard</b> Pg. 214
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<b>Text Correlation</b> Pgs. 178-181	<b>Rating</b> 1	<b>Additional Resources</b> Estimation Problem Activity
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<p><b>Assessment</b></p> <p>Estimate the sum or difference:</p> <p>1. <math>\frac{3}{8} + \frac{5}{12}</math></p> <p>(a) 0                      (b) <math>\frac{1}{2}</math>                      (c) 1                      (d) 2</p> <p>2. <math>\frac{8}{9} - \frac{5}{12}</math></p>
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**Grade 7: Number Sense /Computation**

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							M								

<p><b>District Objective</b></p> <p>*1. Model fractions, decimals, and mixed numbers and incorporate them into computational skills and problem solving situations.</p> <p>*2. Perform basic computation with fractions.</p> <p><i>*Critical to success in next course.</i></p>	<b>PASS Process Standard</b>	<b>Quarter II</b> <b>No. Days</b> 4
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" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP
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<b>PASS Objective</b> The student will...	<b>NCTM Standard</b> Pg. 214
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<b>Text Correlation</b> Pgs. 182-193 Pgs. 207-209	<b>Rating</b> 1	<b>Additional Resources</b> Equivalent Fractions Game; <a href="http://funbrain.com">funbrain.com</a> “Power Football”; <a href="http://www.learningwave.com">www.learningwave.com</a> <a href="http://funbrain.com">funbrain.com</a> “Soccer Shootout” <a href="http://www.col-ed.com/cur/math/math19.txt">www.col-ed.com/cur/math/math19.txt</a> “Fraction Hunt”
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**Assessment**

1. After ordering 2 pizzas, you have  $\frac{1}{3}$  of one pizza left and  $\frac{3}{4}$  of the other. What fraction of the pizzas do you have left?

**Grade 7: Number Sense / Computation**

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	M						

<b>District Objective</b> Apply decimal and fraction estimation techniques to make reasonable estimates with percents.	<b>PASS Process Standard</b>	<b>Quarter II</b> <b>No. Days</b> 1
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP		

<b>PASS Objective</b> The student will...	<b>NCTM Standard</b> Pg. 214
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<b>Text Correlation</b> Pgs. 433-435	<b>Rating</b> 3	<b>Additional Resources</b> Grid Paper; Activity Card 11-7; <a href="http://algebrahelp.com/lessons/simplifying/combiningliketerms/pg3.htm">algebrahelp.com/lessons/simplifying/combiningliketerms/pg3.htm</a> <a href="http://funbrain.com">funbrain.com</a> "Penguin Waiter" <a href="http://www.col-ed.org/cur/math/math24.txt">www.col-ed.org/cur/math/math24.txt</a>
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<p><b>Assessment</b></p> <p>1. If a \$19.99 shirt is on sale for 25% off, about how much change would you get from a \$20 bill?</p>
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**Grade 7: Number Sense /Computation (Ratio)**

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							I	E							

<p><b>District Objective</b></p> <p>*1. Write ratios and rates as fractions in lowest terms.</p> <p>*2. Write proportions.</p> <p><i>*Critical to success in next course.</i></p>	<p><b>PASS Process Standard</b></p>	<p><b>Quarter II</b></p> <p><b>No. Days</b></p> <p>9</p>
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" ITBS ! CRT " EXPLORE " EOI " PLAN " ACT " AP																
<b>PASS Objective</b> The student will... <b>II. Number Sense and Computation</b> B. Ratio, Proportion, and Percents 2. Identify and write problems using <b>ratio and proportion</b> (e.g., find equivalent <b>ratios</b> ).														<b>NCTM Standard</b> Pgs. 214, 240		
<b>Text Correlation</b> Pgs. 410-413 Pgs. 417-420				<b>Rating</b> 1 1		<b>Additional Resources</b> AIMS Proportional Reasoning Book; Ratio/Rate Activity; <a href="http://www.col-ed.org/cur/math/math17.txt">www.col-ed.org/cur/math/math17.txt</a> <a href="http://www.lightspan.com/stuart/rallyrace.html">www.lightspan.com/stuart/rallyrace.html</a>										
<b>Assessment</b>  1. Solve: (a) $\frac{3}{4} = \frac{x}{20}$ (b) $\frac{16}{45} = \frac{48}{x}$  2. 8 Students represent 25% of the class. How many students are in the class?																
<b>Grade 7: Number Sense / Computation (Ratio and Proportion)</b>																
K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal	
							I	E								
<b>District Objective</b> *Apply the concept of ratio and proportion to solve problems.  *Critical to success in next course.												<b>PASS Process Standard</b>		<b>Quarter II</b> <b>No. Days</b> 6		

" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP		
<b>PASS Objective</b> The student will... <b>I. Number Sense and Computation</b> <b>B. Ratio, Proportion, and Percents</b> 1. Understand the concept of <b>ratio</b> and <b>proportion</b> and be able to demonstrate it with models (e.g., similar geometric shapes, growth patterns, scale models).		<b>NCTM Standard</b> Pgs. 214, 240
<b>Text Correlation</b> Pgs. 433-435	<b>Rating</b> 1	<b>Additional Resources</b> AIMS Proportional Reasoning Book PBS Mathline and Video; Robin's Lesson 2 - "Pizza Your Way"
<b>Assessment</b>  1. Write three ratios of corresponding sides for each pair of similar triangles.          2. In Mrs. Brown's math class of 30 students, 5 out of 6 students passed the final exam. How many students passed?		

<b>Grade 7: Number Sense / Computation (Proportions)</b>																
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal	
							I	E								
<b>District Objective</b> Solve problems involving proportional reasoning.												<b>PASS Process Standard</b>		<b>Quarter II</b> <b>No. Days</b> 1		
" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP																



" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP																																										
<b>PASS Objective</b> The student will... <b>II. Number Sense and Computation</b> B. Ratio, Proportion, and Percents 3. <b>Estimate</b> and solve problems using ratio, proportions, and percents (e.g., include percents greater than 100 and less than 1, use scale factors, determine missing sides of similar figures, construct circle graphs).														<b>NCTM Standard</b> Pg. 214																												
<b>Text Correlation</b> Pgs. 462-468				<b>Rating</b> 1		<b>Additional Resources</b> Calculators; A Statistical Study on the Letters of the Alphabet Activity; We Are Going Shopping Activity; <a href="http://funbrain.com">funbrain.com</a> "Penguin Waiter"; <a href="http://learningwave.com">learningwave.com</a> "Garden"																																				
<b>Assessment</b>  1. What is 25% of 56?  2. 150% of what number is 15?  3. Convert the following: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Fraction</u></th> <th style="text-align: left;"><u>Decimal</u></th> <th style="text-align: left;"><u>Percent</u></th> </tr> </thead> <tbody> <tr> <td>1/5</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>.008</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>60%</td> </tr> <tr> <td>1/4</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>1/2</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>.5</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>.8</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>75%</td> </tr> </tbody> </table>																<u>Fraction</u>	<u>Decimal</u>	<u>Percent</u>	1/5	_____	_____	_____	.008	_____	_____	_____	60%	1/4	_____	_____	1/2	_____	_____	_____	.5	_____	_____	.8	_____	_____	_____	75%
<u>Fraction</u>	<u>Decimal</u>	<u>Percent</u>																																								
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_____	_____	75%																																								
<b>Grade 7: Number Sense / Computation (Proportion)</b>																																										
K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal																											
							I	E																																		
<b>District Objective</b> Solve straightforward problems involving rates, proportions, percentages, and fractions.												<b>PASS Process Standard</b>		<b>Quarter II</b> <b>No. Days</b> 3																												
" ITBS ! CRT ! EXPLORE " EOI " PLAN " ACT " AP																																										

<b>PASS Objective</b> The student will... <b>II. Number Sense and Computation</b> B. Ratio, Proportion, and Percents 4. Apply concepts of rate of change (e.g., heart rate per minute, pay to hours worked overtime, area with a change in sides).		<b>NCTM Standard</b> Pgs. 214, 240
<b>Text Correlation</b> Pgs. 414-416	<b>Rating</b> 3	<b>Additional Resources</b> Calculators AIMS Proportional Reasoning Book Finding Unit Price Activity
<b>Assessment</b>  A student on the local softball team has batted 40 times and has 24 hits. At this rate, how many hits will she have if she bats 100 times?  (a) 48      *(b) 60      (c) 68      (d) 72      (e) 84		

<b>Grade 7: Data Analysis / Probability</b>																
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal	
							I	E	M							
<b>District Objective</b> 1. Rate chance events between impossible and certain. 2. Express probabilities as fractions and decimals.											<b>PASS Process Standard</b>		<b>Quarter II</b> <b>No. Days</b> 1			
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP																

<b>PASS Objective</b> The student will... <b>V. Data Analysis - Probability</b> B. Express probabilities as fractions and decimals.	<b>NCTM Standard</b> Pg. 248
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<b>Text Correlation</b> Pgs. 495-496	<b>Rating</b> 2	<b>Additional Resources</b> Fair or Foul Activity Sheet
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**Assessment**

1. Where on this line would you place the event of throwing a number greater than 1 on a number cube with faces numbered 1 to 6:

(a) Near A  
 (b) Near H  
 (c) Near the middle  
 (d) In the left half

2. A coin is tossed 3 times. What is the probability that the fourth toss will land on tails?

**Grade 7: Data Analysis / Probability**

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	M						

<b>District Objective</b> 1. Comprehend and use the definition of probability to solve problems in various settings. 2. Determine the probability of a simple event.	<b>PASS Process Standard</b>	<b>Quarter II</b> <b>No. Days</b> 1
<b>" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>		

<b>PASS Objective</b> The student will... <b>V. Data Analysis - Probability</b> A. Predict possible outcomes and compute simple probabilities given data from a sample (e.g., use data from lists, tree diagrams, frequency distribution tables, area models).	<b>NCTM Standard</b> Pg. 248
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<b>Text Correlation</b> Pgs. 157-160	<b>Rating</b> 1	<b>Additional Resources</b> <a href="http://www.col-ed.org/cur/math/math15.txt">www.col-ed.org/cur/math/math15.txt</a> “Probability: The Study of Chance”; Learning About Ratios: A Sandwich Study Activity; Card Probability: A Probability Activity; <a href="http://www.mathgoodies.com">www.mathgoodies.com</a> (Probability)
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<b>Assessment</b>  A box contains 8 marbles: 1 solid red, 3 blue speckled, 2 green speckled, and 2 solid yellow. If Omar picks a marble at random from the box, what is the probability that it will be speckled?  (a) $\frac{1}{8}$ (b) $\frac{1}{4}$ (c) $\frac{3}{8}$ (d) $\frac{3}{5}$ *(e) $\frac{5}{8}$
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**Grade 7: Data Analysis / Probability**

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							I	E	M						

<b>District Objective</b> Find and/or compare probability of outcomes and events involving “or” and “not”.	<b>PASS Process Standard</b>	<b>Quarter II</b> <b>No. Days</b> 1
" ITBS ! CRT " EXPLORE " EOI " PLAN " ACT " AP		

<p><b>PASS Objective</b> The student will...</p> <p><b>V. Data Analysis - Probability</b></p> <p>C. Determine the <b>probability</b> of an event involving “or” or “not” (e.g., on a spinner with 1 blue, 2 red, and 2 yellow sections, what is the <b>probability</b> of getting a red or a yellow?).</p>	<p><b>NCTM Standard</b> Pg. 248</p>
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<p><b>Text Correlation</b> Pgs. 201-203</p>	<p><b>Rating</b> 2</p>	<p><b>Additional Resources</b> A Statistical Study on the Letters of the Alphabet; About Teaching Mathematics by Marilyn Burns; <a href="http://www.mathgoodies.com">www.mathgoodies.com</a> (Probability)</p>
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<p><b>Assessment</b></p> <p>There are six cards numbered 1-6 lying facedown on a table. For each of Exercises 1-4 choose one card. Find each probability.</p> <p>1. P(3 or 4) <b>ANSWER:</b> <math>\frac{1}{3}</math></p> <p>2. P(not 5 or 6) <b>ANSWER:</b> <math>\frac{2}{3}</math></p> <p>3. P(1, 5, or 6) <b>ANSWER:</b> <math>\frac{1}{2}</math></p> <p>4. P(not 1, 2, 3, 4, or 5) <b>ANSWER:</b> <math>\frac{1}{6}</math></p>
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**Grade 7: Data Analysis / Probability**

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							I	E	M						

<b>District Objective</b> 1. Devise and carry out experiments or sampling to determine probabilities in real-world situations. 2. Analyze data, draw conclusions, and present the conclusion.	<b>PASS Process Standard</b>	<b>Quarter II</b> <b>No. Days</b> 1
<b>" ITBS ! CRT " EXPLORE " EOI " PLAN " ACT " AP</b>		

<b>PASS Objective</b> The student will... <b>V. Data Analysis - Probability</b> D. Explore sampling procedures (random, limited, biased) and draw conclusions about populations (e.g., consider potential sources of bias).	<b>NCTM Standard</b> Pg. 248
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<b>Text Correlation</b> Pgs. 157-160	<b>Rating</b> 1	<b>Additional Resources</b> Soil Sample Activity; In the Bag Activity
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**Assessment**

There are 1 red, 2 blue, 3 green, and 5 yellow balls in a bag. After each draw, place the ball back in the bag. What is the probability of drawing:

Red \_\_\_\_\_  
 Blue \_\_\_\_\_  
 Green \_\_\_\_\_  
 Yellow \_\_\_\_\_

**Grade 7: Number Sense / Computation (Exponents)**

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							E	M							

<b>District Objective</b> Build models of all square numbers less than or equal to 100.										<b>PASS Process Standard</b>				<b>Quarter II</b> <b>No. Days</b> 1	
" ITBS ! CRT ! EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>II. Number Sense and Computation</b> C. Exponents 2. Build models of <b>multiples</b> to investigate squares and perfect square roots (e.g., build rectangular <b>arrays</b> for numbers 1 to 100 and note which can be represented as squares).										<b>NCTM Standard</b> Pg. 214					
<b>Text Correlation</b> Pgs. 338-340				<b>Rating</b> 1		<b>Additional Resources</b> <a href="http://funbrain.com">funbrain.com</a>									
<b>Assessment</b>  Within a 10 cm square, how many perfect squares are present? List each one.															
<b>Grade 7: Number Sense / Computation</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E							

<b>District Objective</b> Estimate square roots.	<b>PASS Process Standard</b>	<b>Quarter II</b> <b>No. Days</b> 1
" ITBS ! CRT " EXPLORE " EOI " PLAN " ACT " AP		

<b>PASS Objective</b> The student will... <b>II. Number Sense and Computation</b> C. Exponents 3. Estimate the square root of a number between two consecutive integers.	<b>NCTM Standard</b> Pg. 214
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<b>Text Correlation</b> Pgs. 341-342	<b>Rating</b> 1	<b>Additional Resources</b> <a href="http://www.4mathstuff.com">www.4mathstuff.com</a> (Pre-Algebra Square Roots)
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**Assessment**

What is the best whole number estimate for  $\sqrt{18}$ ? Explain why.

<b>Grade 7: Number Sense / Computation (Exponents)</b>																
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal	
							I	E	M							

<b>District Objective</b> Explore exponents, powers, and roots using models and technology.										<b>PASS Process Standard</b>				<b>Quarter II</b> <b>No. Days</b> 1	
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>II. Number Sense and Computation</b> C. Exponents 1. Describe concepts of positive exponents including zero using <b>manipulatives</b> and calculators to develop exponential patterns (e.g., model getting paid a penny the first day, 2 cents the second day, 4 cents the third day. . . )														<b>NCTM Standard</b> Pg. 214	
<b>Text Correlation</b> Pgs. 32-35 Pgs. 338-340			<b>Rating</b> 2		<b>Additional Resources</b> Calculator; World Population Study Activity										
<b>Assessment</b>  What is the relation of each number to the previous number in this pattern?  $10^0, 10^1, 10^2, 10^3$  (a) It is $\frac{1}{10}$ as great. (b) It is 10 times as great. (c) It is 10 less. (d) It is 10 more.															
<b>Grade 7: Number Sense / Computation (Exponents)</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E							

<b>District Objective</b> *Express numbers greater than 100 in scientific notation. *Critical to success in next course.										<b>PASS Process Standard</b>			<b>Quarter II</b> <b>No. Days</b> 1		
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>II. Number Sense and Computation</b> C. Exponents 4. Read, represent, and interpret large numbers in expanded, exponential, and scientific notation; use benchmarks (e.g., population of one's state) to discuss their magnitude.													<b>NCTM Standard</b> Pg. 214		
<b>Text Correlation</b> Pgs. 64-69				<b>Rating</b> 1		<b>Additional Resources</b> <a href="http://www.gomath.com">www.gomath.com</a> Go to: algebra solutions/algebra/scientific notation									
<b>Assessment</b>  Which number is 7,000,000,000 in scientific notation?  (a) $7.0 \times 10^9$ (b) $70 \times 10^8$ (c) $7 \times 10^{10}$ (d) $0.7 \times 10^{11}$															
<b>Grade 7: Number Sense / Computation (Integers)</b>															
K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							I	E							

<b>District Objective</b>										<b>PASS Process Standard</b>				<b>Quarter III</b>	
*1. Use the number line to locate and compare integers and their opposites. *2. Use $>$ , $<$ , or $=$ to order positive and negative integers. *3. Describe simple inequalities (e.g., list values of $x$ such that $x < 5$ and $x > 1 + 2$ ). <i>*Critical to success in next course.</i>														<b>No. Days</b> 2	
<b>" ITBS ! CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>															
<b>PASS Objective</b>														<b>NCTM Standard</b>	
The student will...														Pg. 214	
<b>II. Number Sense and Computation</b>															
<b>A. Integers</b>															
1. Represent, compare, and order positive and negative <b>integers</b> and describe their use in real-life situations (e.g., temperature, sea level, stock market fluctuations, football yardage).															
<b>Text Correlation</b>			<b>Rating</b>			<b>Additional Resources</b>									
Pgs. 254-258			1			U.S. and World Weather Activity; <a href="http://www.sosmath.com/algebra/inequalities/ineq03/ineq03.html">http://www.sosmath.com/algebra/inequalities/ineq03/ineq03.html</a>									
<b>Assessment</b>															
1. Order the numbers from least to greatest on a number line.															
24, -42, -12, 6, 0 25, -26, 26, 0, -25															
2. Which of the following statements is <i>not</i> true?															
(a) $21.2 < 21.002$															
(b) $21.2 > 21.020$															
(c) $21.2 = 21.200$															
(d) $20.2 < 22.0$															
3. List all integer values of $x$ such that $x > 5$ and $x < 12 - 3$ .															
<b>Grade 7: Number Sense / Computation (Integers)</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E							

<b>District Objective</b> *Add, subtract, multiply and divide integers.  <i>*Critical to success in next course.</i>		<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days</b> 7
<b>" ITBS " ! CRT " EXPLORE " EOI " PLAN " ACT " AP</b>			
<b>PASS Objective</b> The student will... <b>II. Number Sense and Computation</b> A. Integers 2. Use basic <b>operations</b> on <b>integers</b> to solve problems.			<b>NCTM Standard</b> Pg. 214
<b>Text Correlation</b> Pgs. 262-266 Pgs. 267-271 Pgs. 277-280 Pg. 281	<b>Rating</b> 1 1 1 1	<b>Additional Resources</b> Computation Game; Counter Toss Activity Zero to Hero Card Games; Integer Scramble Activity	
<b>Assessment</b>  1. (a) $-9 + -3 =$ (b) $-72 \div -9 =$ (c) $-7 - (-2) =$ (d) $\frac{d}{-16} = 1$  2. Augusta had 60 points in a game. She lost a certain number of points, which resulted in a new score of $-10$ . Which of the following represents the change in her point total?  (a) $-10$ points (b) $50$ points (c) $60$ points (d) $-70$ points  3. During a 7-day strike, an airline reported an average change in income of $-210,000$ dollars per day. Express this situation as a multiplication of integers and find the total change in income during that time period.			

<b>Grade 7: Patterns</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	M						

<b>District Objective</b> Solve problems by finding and extending a pattern.		<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days</b> 2												
" ITBS ! CRT " EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>I. Patterns: Algebraic Expressions and Equations</b> A. Use expressions to describe the general case for extensions represented by data in tables, graphs, and models (e.g., 2, 4, 6, 8, . . . 2n).			<b>NCTM Standard</b> Pgs. 222, 274												
<b>Text Correlation</b> Pgs. 136-144	<b>Rating</b> 1	<b>Additional Resources</b> The Perfect Number Journey Activity													
<b>Assessment</b>  Find a formula relating the variables.  <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td><math>x</math></td> <td>10</td> <td>20</td> <td>30</td> <td>40</td> <td>50</td> </tr> <tr> <td><math>y</math></td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> </tr> </table>				$x$	10	20	30	40	50	$y$	2	4	6	8	10
$x$	10	20	30	40	50										
$y$	2	4	6	8	10										

<b>Grade 7: Patterns: Algebraic Expressions and Equations</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	M						

<b>District Objective</b> *Write expressions with a single variable to model pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions). *Critical to success in next course.		<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days</b> 2
" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP			
<b>PASS Objective</b> The student will... <b>I. Patterns: Algebraic Expressions and Equations</b> <b>B. Simplify and evaluate algebraic expressions (e.g., if <math>x = -5</math> evaluate <math>2x</math>).</b>			<b>NCTM Standard</b> Pg. 222
<b>Text Correlation</b> Pgs. 233-235	<b>Rating</b> 1	<b>Additional Resources</b> California Here We Come Activity	
<b>Assessment</b>  Solve using the distance formula $d = rt$ .  1. Judy rides her bike at a rate of 12 mph. How long does it take her to ride 8 miles?  2. If $a = 2$ and $b = 3$ , evaluate the expression $ab$ .			

<b>Grade 7: Patterns: Algebraic Expressions and Equations</b>																
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal	
							I	M	E							

<b>District Objective</b> *1. Interpret the meaning of a variable within the context of the problem. *2. Demonstrate some intuitive knowledge of expressions and equations (e.g., identify an expression for a total as $b + g$ ). *3. Identify an expression or equation that models a setting. <i>*Critical to success in next course.</i>		<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days 1</b>
<b>" ITBS " CRT " EXPLORE " EOI ! PLAN " ACT " AP</b>			
<b>PASS Objective</b> The student will... <b>I. Patterns: Algebraic Expressions and Equations</b> B. Simplify and evaluate algebraic expressions (e.g., if $x = -5$ evaluate $2x$ ).			<b>NCTM Standard</b> Pg. 222
<b>Text Correlation</b> Pgs. 28-31	<b>Rating</b> 3	<b>Additional Resources</b> See Teacher's Guide; Counters; Centimeter Cubes; Activity Card 1-8; Cube Coloring Problem; <a href="http://lessonplanspage.com/mathVariablesAndSolvingForUnknownVars78.htm">lessonplanspage.com/mathVariablesAndSolvingForUnknownVars78.htm</a> <a href="http://www.col-ed.org/cur/math/math36.txt">www.col-ed.org/cur/math/math36.txt</a> <a href="http://hrmvideo.com">hrmvideo.com</a> (Absurd Math Episode 1.1 and 2)	
<b>Assessment</b>  1. If $f$ is the number of first graders who play soccer and $s$ is the number of second graders who play soccer, which of the following expressions represents the total number of first and second graders who play soccer?  *(a) $f + s$ (b) $f - s$ (c) $s - f$  (d) $f \times s$ (e) $f + s$  2. Seven people made a total of 133 phone calls. What equation would you use to calculate the average number ( $N$ ) of phone calls per person?  *(a) $7N = 133$ (b) $133N = 7$ (c) $7 \times 133 = N$  (d) $N \times 133 = 7$ (e) $133 + 7 = N$			

<b>Grade 7: Patterns</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							

<b>District Objective</b> Solve problems by interpreting bar graphs, line graphs, and circle graphs.										<b>PASS Process Standard</b>				<b>Quarter III</b> <b>No. Days</b> 2	
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>I. Patterns: Algebraic Expressions and Equations</b> E. Describe and identify situations that model linear graphs.										<b>NCTM Standard</b> Pgs. 222, 268					
<b>Text Correlation</b> Pgs. 90-92				<b>Rating</b> 2		<b>Additional Resources</b> Interpreting Graphs Activity									
<b>Assessment</b>  During what years was there no increase in the number of employees?  Does the graph show an increasing or decreasing trend, or neither?															

<b>Grade 7: Patterns</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	M						

<b>District Objective</b> Analyze data in tables, diagrams, and graphs to discover a pattern.		<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days</b> 2												
" ITBS ! CRT ! EXPLORE " EOI ! PLAN " ACT " AP															
<b>PASS Objective</b> The student will...			<b>NCTM Standard</b> Pgs. 222, 268, 274												
<b>Text Correlation</b> Pgs. 101-103	<b>Rating</b> 3	<b>Additional Resources</b> AIMS Proportional Reasoning Book; <a href="http://www.teachervision.com/lesson-plans/lesson-696.html">www.teachervision.com/lesson-plans/lesson-696.html</a> <a href="http://142.3.219.38/RR/database/RR.09.97/gauthier46.html">http://142.3.219.38/RR/database/RR.09.97/gauthier46.html</a>													
<b>Assessment</b>  Which formula gives the values in this table?  <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td><math>x</math></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td><math>y</math></td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> </tr> </table> (a) $y = 6x$ (b) $y = x - 6$ (c) $y = x + 6$ (d) $y = x - 3$				$x$	1	2	3	4	5	$y$	7	8	9	10	11
$x$	1	2	3	4	5										
$y$	7	8	9	10	11										

<b>Grade 7: Data Analysis</b>															
<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>Pre- Alg</b>	<b>Alg I</b>	<b>Geom</b>	<b>Alg II</b>	<b>MA</b>	<b>P &amp; S</b>	<b>Pre- Cal</b>	<b>AP Cal</b>
							E	M							

<b>District Objective</b> *Find the mean, median, and mode for a set of data.  *Critical to success in next course.		<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days</b> 4
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP			
<b>PASS Objective</b> The student will...			<b>NCTM Standard</b> Pg. 248
<b>Text Correlation</b> Pgs. 104-107	<b>Rating</b> 1	<b>Additional Resources</b> Hands Down Activity; What's the Favorite Activity; Shapes Away! Activity; Mode Detectors Activity	
<b>Assessment</b>			
1. What is the median of the set of data 10, 18, 9, 63, 21?			
(a) 9                      (b) 18                      (c) 36                      (d) 21			
2. What is the mode(s) for the data 2, 3, 6, 3, 4, 2, 1, 3, 6, 9?			
(a) 9                      (b) 4                      (c) 3                      (d) Not here			
3. What is the mean for the data 1, 21, 8, 7, 16, 19?			
(a) 14                      (b) 10                      (c) 11                      (d) 12			

<b>Grade 7: Data Analysis</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							

<b>District Objective</b> *1. Compute the average of a list of whole numbers. *2. Find the average of numbers when given various settings. *3. Apply the concept of average to find an unknown value. <i>*Critical to success in next course.</i>	<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days</b> 3
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**" ITBS ! CRT ! EXPLORE " EOI ! PLAN " ACT " AP**

<b>PASS Objective</b> The student will...	<b>NCTM Standard</b> Pg. 248
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<b>Text Correlation</b> Pgs. 104-107	<b>Rating</b> 1	<b>Additional Resources</b> <a href="http://www.col-ed.org/math/math13.txt">www.col-ed.org/math/math13.txt</a> <a href="http://www.gomath.com">www.gomath.com</a> Go to: algebra solutions/algebra/mean, median, mode
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**Assessment**

1. What is the average of the following 5 numbers? 199, 208, 133, 12, 98

(a) 110      \*(b) 130      (c) 133      (d) 325      (e) 650

2. Elvis has an average of 92 on 4 tests. Three of the scores are 89, 92, and 95. What is his 4th score?

## Grade 7: Data Analysis

K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							E	M							

<b>District Objective</b> 1. Identify the relative size of entries in a table or chart. 2. Use information provided in a table or chart that meets a given criterion to compute another value.	<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days 1</b>
<b>" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>		
<b>PASS Objective</b> The student will...		<b>NCTM Standard</b> Pgs. 248, 262

<b>Text Correlation</b> Pgs. 113-119	<b>Rating</b> 1	<b>Additional Resources</b> Best Guesser Activity
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**Assessment**

1. The table below gives the number of visitors for the five most visited national parks in the United States during 1996. Which of the national parks had the most visitors during 1996?

Name of national park	Location	Number of visitors
Grand Canyon	AZ	4,537,703
Great Smoky Mountains	TN	9,265,667
National Capital	DC	6,088,610
Olympic	WA	3,348,723
Yosemite	CA	4,046,207

- (a) Grand Canyon      \*(b) Great Smoky Mountains      (C) National Capital  
 (d) Olympic      (e) Yosemite

2. How many more people visited the Great Smoky Mountains than the Grand Canyon and Olympic Parks combined?

**Grade 7: Data Analysis**

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							

<b>District Objective</b> *Use data from a table or chart combined with additional information to solve a mathematics problem. *Critical to success in next course.	<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days 1</b>
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" ITBS " CRT ! EXPLORE " EOI ! PLAN " ACT " AP

<b>PASS Objective</b> The student will...	<b>NCTM Standard</b> Pgs. 248, 256, 262
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<b>Text Correlation</b> Pgs. 113-119	<b>Rating</b> 1	<b>Additional Resources</b> How to Make a Graph on the Computer Activity; Check Writing Lab Activity
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**Assessment**

A survey taken at a local preschool asked each child for his or her favorite number. The following table shows the results. How many of the children's favorite numbers were also their age?

(a) 14                      (b) 20                      \*(c) 29                      (d) 34                      (e) 77

**Grade 7: Data Analysis**

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							

<b>District Objective</b> *Interpret/manipulate data to solve problems.  *Critical to success in next course.		<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days</b> 2
<b>" ITBS ! CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>			
<b>PASS Objective</b> The student will...			<b>NCTM Standard</b> Pgs. 248, 256
<b>Text Correlation</b> Pgs. 109-111	<b>Rating</b> 3	<b>Additional Resources</b> Activity with page 45 also covers objectives on pages 46-47 Fraction Cube Activity	
<b>Assessment</b>  The following graph shows what percentage of the 180 students in social studies received each of the possible grades (A-F). How many of the students in social studies received an A?  (a) 25            (b) 35            *(c) 45            (d) 55            (e) 65			

<h2 style="text-align: center;">Grade 7: Data Analysis</h2>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							

<b>District Objective</b> *1. Choose an appropriate graph for a given set of data. *2. Translate data from one representation to another. <i>*Critical to success in next course.</i>	<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days 2</b>
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" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP

<b>PASS Objective</b> The student will...	<b>NCTM Standard</b> Pgs. 248, 256
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<b>Text Correlation</b> Pgs. 90-92	<b>Rating</b> 3	<b>Additional Resources</b> Activity with page 45 also covers objectives on pages 46-47; Country of Origin Comparison Activity; Graphs, Stories, and Games Activity
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**Assessment**

1. More than one set of data can be shown on the same graph. Here are two different graphs for the data in the table. Which graph is better for comparing sales? Which graph is better for showing trends?

	Jan.	Feb.	March	April	May	June
Sales 1990	27	20	23	30	38	42
Sales 1991	21	25	24	28	40	43

## Grade 7: Data Analysis

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							

<b>District Objective</b> Read, interpret, and make multiple line, circle, and scatter-gram graphs.	<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days 5</b>
" ITBS ! CRT " EXPLORE " EOI " PLAN " ACT " AP		
<b>PASS Objective</b> The student will...		<b>NCTM Standard</b> Pgs. 248, 256

<b>Text Correlation</b> Pgs. 470-473	<b>Rating</b> 1	<b>Additional Resources</b> Spellbound Activity; In A Heartbeat Activity; Healthy Hearts and Bodies Activity
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<b>Assessment</b>															
<p>1. You could use the data from the survey to make a circle graph. How many degrees would be in the central angle for the sector labeled "food"?</p> <p style="text-align: center;">(a) 90° (b) 108° (c) 120° (d) 54°</p> <p style="text-align: right;">Use the graph to answer questions 2 &amp; 3.</p> <p>2. What is the charge for each hour after the first hour? (a) \$1.00      (b) \$1.25 (c) \$2.50      (d) \$2.75</p> <p>3. What would the charge be if you used a canoe for only a half hour? (a) \$0.75      (b) \$1.25 (c) \$2.50      (d) \$5.00</p>															

## Grade 7: Data Analysis

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I								

<b>District Objective</b> Interpret and display information with frequency tables, histograms, stem-and-leaf plots, and/or box and whisker graphs.	<b>PASS Process Standard</b>	<b>Quarter III</b> <b>No. Days 5</b>
<b>" ITBS ! CRT " EXPLORE " EOI " PLAN " ACT " AP</b>		

<b>PASS Objective</b> The student will...	<b>NCTM Standard</b> Pgs. 248, 256
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<b>Text Correlation</b> Pgs. 109-111	<b>Rating</b> 3	<b>Additional Resources</b> Leaf It to Me Activity
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**Assessment**

Use the stem-and-leaf diagram of test scores.

Stem	Leaf
9	2
8	4 4 5 6
7	2 2 5 5 8
6	0 1 2 5

- What was the lowest score in the class?  
 (a) 21            (b) 50            (c) 90            (d) 60
- How many students earned a grade of 84?  
 (a) 0            (b) 2            (c) 1            (d) 3
- How many students earned scores in the 70s or 80s?  
 (a) 9            (b) 4            (c) 14            (d) 5

**Grade 7: Geometry - Plane**

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E		M					

<b>District Objective</b> Identify corresponding parts of similar polygons and apply in solving problems.	<b>PASS Process Standard</b>	<b>Quarter IV</b> <b>No. Days</b> 2
<b>" ITBS ! CRT " EXPLORE " EOI " PLAN " ACT " AP</b>		

<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> E. Identify, describe, and sketch relationships between geometric figures using <b>congruency</b> and similarity and incorporate into problem-solving skills (e.g., explore <b>ratios</b> and similarity with overhead projectors).	<b>NCTM Standard</b> Pgs. 232, 240
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<b>Text Correlation</b> Pgs. 422-429 Pg. 427 Mini Lab	<b>Rating</b> 1	<b>Additional Resources</b> Floor Plans Activity
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**Assessment**

When a maple tree’s shadow is 9 feet long, a redwood tree’s shadow is 22.5 feet long. If the maple tree is 30 feet high, how high is the redwood?

<b>Grade 7: Geometry</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							

<b>District Objective</b> Compute the perimeter of polygons: (a) when all side lengths are provided and (b) when some side lengths are unknown.										<b>PASS Process Standard</b>				<b>Quarter IV</b> <b>No. Days</b> 3	
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> A. Develop and use formulas to solve problems involving perimeter (circumference), and area of polygons and circles.										<b>NCTM Standard</b> Pgs. 232, 240					
<b>Text Correlation</b> Pgs. 194-196				<b>Rating</b> 1		<b>Additional Resources</b> Graphing Calculators; Building a Garden Fence Activity; Polygon Party Activity; Building Fences Activity; Perimeter Check Activity; Roll 'N Draw Activity									
<b>Assessment</b>  The length of each side of the pentagon shown below is 17 millimeters. What is the perimeter of the pentagon in millimeters?  (a) 22            (b) 44            (c) 68            *(d) 85            (e) 102															
<b>Grade 7: Geometry - Plane</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							

<b>District Objective</b> *Compute the area and perimeter of rectangles, squares, and triangles when all necessary information is given. *Critical to success in next course.										<b>PASS Process Standard</b>				<b>Quarter IV</b> <b>No. Days</b> 3	
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> A. Develop and use formulas to solve problems involving perimeter (circumference), and area of polygons and circles.										<b>NCTM Standard</b> Pgs. 232, 240					
<b>Text Correlation</b> Pgs. 194-196 Pgs. 243-245 Pgs. 355-358				<b>Rating</b> 1		<b>Additional Resources</b> <u>Constructing Ideas About Geometry</u> by Sandra Ward; Area Formulas Activity; Polygon Areas Activity; Enclosing the Triangles Activity									
<b>Assessment</b>															
Which of the following is a general expression for the perimeter of the right angle above?															
(a) $10 + 26 + 24$															
(b) $2(10 + 24)$															
(c) $26 \times 24$															
(d) $10 \times 26$															
<b>Grade 7: Geometry</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							

<b>District Objective</b> Compute using formulas when all necessary information is provided.	<b>PASS Process Standard</b>	<b>Quarter IV</b> <b>No. Days</b> 2
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" ITBS " CRT ! EXPLORE " EOI ! PLAN " ACT " AP

<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> A. Develop and use formulas to solve problems involving perimeter (circumference), and area of polygons and circles.	<b>NCTM Standard</b> Pg. 240
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<b>Text Correlation</b> Pgs. 194-196 Pgs. 243-245 Pgs. 355-358	<b>Rating</b> 1	<b>Additional Resources</b> Perimeters with a Constant Area Activity
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**Assessment**

Look at the two squares below. What is the area of the shaded portion of the larger square?

(a)  $64 m^2$   
 (b)  $9 m^2$   
 \*(c)  $55 m^2$   
 (d)  $25 m^2$

**Grade 7: Geometry**

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E		M					

<b>District Objective</b> Identify necessary information and use formulas to find the circumference and area of circles.		<b>PASS Process Standard</b>	<b>Quarter IV</b> <b>No. Days</b> 2
" ITBS ! CRT ! EXPLORE " EOI ! PLAN " ACT " AP			
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> A. Develop and use formulas to solve problems involving perimeter (circumference), and area of polygons and circles.			<b>NCTM Standard</b> Pg. 240
<b>Text Correlation</b> Pgs. 197-200 Pgs. 360-361	<b>Rating</b> 1	<b>Additional Resources</b> Circle Space Activity; As Easy as Pi! Activity; Diameter and Circumference Activity; All Wrapped Up Activity; Circlespin Activity; Circle and Square Activity	
<b>Assessment</b>  A circular table top has a radius of 3.5 feet. What is the area of the table top, rounded to the nearest whole number of square feet?  (a) 11            (b) 22            (c) 33            *(d) 38            (e) 121			

<b>Grade 7: Geometry</b>															
K	1	2	3	4	5	6	7	Pre-Alg	Alg I	Geom	Alg II	MA	P & S	Pre-Cal	AP Cal
							I	E		M					

<b>District Objective</b> Use the angle sum relationships in triangles and quadrilaterals.									<b>PASS Process Standard</b>				<b>Quarter IV</b> <b>No. Days</b> 1		
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> B. Describe, draw, classify, and compare geometric figures according to their shapes and properties (e.g., circles, quadrilaterals, hexagons, determine whether all squares are rectangles, explain why “only” triangles, quadrilaterals, and hexagons can tile a plane).													<b>NCTM Standard</b> Pgs. 232, 240		
<b>Text Correlation</b> Pgs. 321-323 Pg. 306 Pgs. 321-323				<b>Rating</b> 1		<b>Additional Resources</b> Finding the Angle Sum Activity; Angle Spin Activity; What’s Your Angle? Activity									
<b>Assessment</b>  What is the angle measurement of $M$ ?															

<b>Grade 7: Geometry</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							

<b>District Objective</b>									<b>PASS Process Standard</b>				<b>Quarter IV No. Days 2</b>		
1. Identify right angles, straight angles, and $180^\circ$ as the sum of the angles in a triangle.															
2. Identify and compare complementary, supplementary, and vertical angles.															
" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will...													<b>NCTM Standard</b> Pgs. 232, 240		
<b>III. Geometry - Plane</b>															
D. Describe and compare interior, exterior, complementary, supplementary, and vertical angles (e.g., using graph paper, software, protractors to measure angles between parallel lines with a transversal).															
<b>Text Correlation</b> Pgs. 296-300			<b>Rating</b> 1		<b>Additional Resources</b> Web of Lines Activity; Angles Activity; Paper Folding Constructions Theorem Activity; <a href="http://www.ies.co.jp/math/java/geo/san180/san180.html">www.ies.co.jp/math/java/geo/san180/san180.html</a> <a href="http://www.aaamath.com/geo612-find-3rd-angle-triangle.html">www.aaamath.com/geo612-find-3rd-angle-triangle.html</a>										
<b>Assessment</b>															
1. What is the measure of $\angle C$ in $\triangle CDE$ below?															
(a) $83^\circ$															
*(b) $97^\circ$															
(c) $103^\circ$															
(d) $107^\circ$															
(e) $113^\circ$															
2. Name an angle complementary to $\angle BGC$															
3. Name an angle supplementary to $\angle EGD$															
4. $\angle BGA$ and _____ are vertical angles.															
5. $\angle EGA$ and _____ are vertical angles.															
<b>Grade 7: Geometry</b>															
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal

							E	M										
<b>District Objective</b> Identify parallel and perpendicular lines.											<b>PASS Process Standard</b>			<b>Quarter IV</b> <b>No. Days</b> 1				
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP																		
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> C. Identify parallel, perpendicular, horizontal, and vertical lines according to their properties (e.g., examine properties of geometric figures containing sets of perpendicular or parallel lines on a coordinate graph).														<b>NCTM Standard</b> Pgs. 232, 240				
<b>Text Correlation</b> Pgs. 301-302					<b>Rating</b> 1		<b>Additional Resources</b> Building Lines Activity; Finding Lines in the Real World Activity; Build-Draw-Tell Activity; Parallel and Perpendicular Activity											
<b>Assessment</b>  1. If $\angle 6 \cong \angle 3$ , name the two lines that must be parallel.  2. If $\angle 11$ and $\angle 7$ are supplementary, name two lines that must be parallel.  3. Complete: If $m\angle 6 + \_\_\_\_\_ = 180^\circ$ , then $j \parallel k$ .																		
<b>Grade 7: Geometry</b>																		
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal			

								I	E		M						
<b>District Objective</b> Identify angles in relationship to transversal and parallel lines.											<b>PASS Process Standard</b>			<b>Quarter IV</b> <b>No. Days</b> 1			
" ITBS " CRT ! EXPLORE " EOI " PLAN " ACT " AP																	
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> D. Describe and compare interior, exterior, complementary, supplementary, and vertical angles (e.g., using graph paper, software, protractors to measure angles between parallel lines with a transversal).											<b>NCTM Standard</b> Pgs. 232, 240						
<b>Text Correlation</b> Pgs. 314 & 322					<b>Rating</b> 1		<b>Additional Resources</b>										
<b>Assessment</b>  Give the measure of the unknown angles.																	

<b>Grade 7: Geometry</b>																	
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal		

								E	M										
<b>District Objective</b> Find the volume of cubes and rectangular prisms.											<b>PASS Process Standard</b>			<b>Quarter IV</b>					
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP														<b>No. Days</b> 2					
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> A. Develop and use formulas to solve problems involving perimeter (circumference), and area of polygons and circles.														<b>NCTM Standard</b> Pgs. 232, 240					
<b>Text Correlation</b> Pgs. 394-397					<b>Rating</b> 1		<b>Additional Resources</b> Packing Boxes Activity; Building Prisms Activity												
<b>Assessment</b>  Which of these is the volume of a cube with dimensions of 5 cm × 5 cm × 5 cm?  (a) 100 cm <sup>3</sup> (b) 125 cm <sup>3</sup> (c) 150 cm <sup>3</sup> (d) 175 cm <sup>3</sup>																			
<b>Grade 7: Geometry</b>																			
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal				

								E	M										
<b>District Objective</b> Draw, describe, and classify triangles and quadrilaterals by sides and angles.											<b>PASS Process Standard</b>			<b>Quarter IV</b> <b>No. Days</b> 2					
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP																			
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> B. Describe, draw, classify, and compare geometric figures according to their shapes and properties (e.g., circles, quadrilaterals, hexagons, determine whether all squares are rectangles, explain why "only" triangles, quadrilaterals, and hexagons can tile a plane).														<b>NCTM Standard</b> Pgs. 232, 240					
<b>Text Correlation</b> Pgs. 307-310					<b>Rating</b> 1		<b>Additional Resources</b>												
<b>Assessment</b>  1. Which of these is always true of equilateral triangles?  (a) All three sides are the same length.                      (b) All three sides are different lengths. (c) There is at least one obtuse angle.                      (d) Two sides have different lengths.  2. Which quadrilateral can have four congruent sides and angles that are not right angles? (a) Rhombus                      (b) Square                      (c) Rectangle                      (d) Trapezoid  3. Which quadrilateral can have two pairs of parallel sides and sides that are not all congruent? (a) Rhombus                      (b) Square                      (c) Rectangle                      (d) Trapezoid																			
<b>Grade 7: Geometry</b>																			
K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal				

							E	M							
<b>District Objective</b> *Locate points using coordinates and properties of vertical and horizontal lines. *Critical to success in next course.											<b>PASS Process Standard</b>		<b>Quarter IV</b> <b>No. Days</b> 1		
<b>" ITBS ! CRT ! EXPLORE " EOI ! PLAN " ACT " AP</b>															
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> C. Identify parallel, perpendicular, horizontal, and vertical lines according to their properties (e.g., examine properties of geometric figures containing sets of perpendicular or parallel lines on a coordinate graph).											<b>NCTM Standard</b> Pgs. 222, 248				
<b>Text Correlation</b> Pgs. 259-261; Classroom Vignette Pg. 260; Cooperative Learning Activity 7-3					<b>Rating</b> 1		<b>Additional Resources</b> Cartesian Cartoons (Publisher, Mystery Media); Graphiti 1 and 2 (Activity Resources Co., Inc.); Northern Native Activity; You Get Down Off This Activity; Look What Followed Me Home, Ma! Activity								
<b>Assessment</b>  One of the points, labeled $A$ through $E$ , shown in the standard $(x, y)$ coordinate plane below has coordinates $(-1, 2)$ . Which point is it?  *(a) $A$ (b) $B$ (c) $C$ (d) $D$ (e) $E$															

**Grade 7: Geometry**

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal														
							E	M																					
<b>District Objective</b> *1. Locate points on a number line. *2. Estimate or calculate the length of a line segment based on the other lengths given on a geometric figure.  <i>*Critical to success in next course.</i>												<b>PASS Process Standard</b>		<b>Quarter IV No. Days 1</b>															
<b>" ITBS ! CRT ! EXPLORE " EOI " PLAN " ACT " AP</b>																													
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> F. Locate points on a coordinate plane in all four quadrants.													<b>NCTM Standard</b> Pgs. 222, 248																
<b>Text Correlation</b> Pgs. 259-261 Pg. 261 Extending the Lesson - Using Geometry							<b>Rating</b> 1		<b>Additional Resources</b>																				
<b>Assessment</b>  1. Find the coordinates of each point.  <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td></td> <td><math>x</math></td> <td><math>y</math></td> </tr> <tr> <td><math>B</math></td> <td></td> <td></td> </tr> <tr> <td><math>D</math></td> <td></td> <td></td> </tr> <tr> <td><math>E</math></td> <td></td> <td></td> </tr> <tr> <td><math>A</math></td> <td></td> <td></td> </tr> </table>																$x$	$y$	$B$			$D$			$E$			$A$		
	$x$	$y$																											
$B$																													
$D$																													
$E$																													
$A$																													
2. What is the length of line segment $ID$ ?																													
<b>Grade 7: Geometry</b>																													

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal															
							E	M																						
<b>District Objective</b> *Locate points in the coordinate plane.  *Critical to success in next course.												<b>PASS Process Standard</b>		<b>Quarter IV</b> <b>No. Days</b> 1																
" ITBS " CRT " EXPLORE " EOI " PLAN " ACT " AP																														
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> F. Locate points on a coordinate plane in all four <b>quadrants</b> .													<b>NCTM Standard</b> Pgs. 222, 248																	
<b>Text Correlation</b> Pgs. 259-261				<b>Rating</b> 1		<b>Additional Resources</b> Graphs, Stories, and Games Activity (see object #47 for stories); <a href="http://www.c3.lanl.gov/mega-math/workbk/graph/grgsm.html">www.c3.lanl.gov/mega-math/workbk/graph/grgsm.html</a> <a href="http://www.accessone.com/~bbunge/algebra/algebra3-1.html">www.accessone.com/~bbunge/algebra/algebra3-1.html</a> <a href="http://www.kings.k12.ca.us/math/lessons/jhcalifornia.html">www.kings.k12.ca.us/math/lessons/jhcalifornia.html</a>																								
<b>Assessment</b>  Find the coordinates of each point. <table border="1" style="margin-left: 20px; margin-top: 20px;"> <thead> <tr> <th></th> <th><math>x</math></th> <th><math>y</math></th> </tr> </thead> <tbody> <tr> <td><math>A</math></td> <td></td> <td></td> </tr> <tr> <td><math>B</math></td> <td></td> <td></td> </tr> <tr> <td><math>C</math></td> <td></td> <td></td> </tr> <tr> <td><math>D</math></td> <td></td> <td></td> </tr> </tbody> </table>																	$x$	$y$	$A$			$B$			$C$			$D$		
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<b>Grade 7: Geometry</b>																														

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							
<b>District Objective</b> Locate the point of intersection of vertical and horizontal lines in the coordinate plane.												<b>PASS Process Standard</b>		<b>Quarter IV</b> <b>No. Days</b> 2	
" ITBS ! CRT ! EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> F. Locate points on a coordinate plane in all four <b>quadrants</b> .													<b>NCTM Standard</b> Pgs. 222, 232		
<b>Text Correlation</b> Pgs. 259-261							<b>Rating</b> 2		<b>Additional Resources</b>						
<b>Assessment</b>  At what points are the $x$ and $y$ axes crossed?															

<b>Grade 7: Geometry</b>
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K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							E	M							
<b>District Objective</b> Develop a plan to solve a problem using patterns, diagrams, etc.												<b>PASS Process Standard</b>		<b>Quarter IV No. Days 1</b>	
" ITBS ! CRT ! EXPLORE " EOI " PLAN " ACT " AP															
<b>PASS Objective</b> The student will... <b>III. Geometry - Plane</b> G. Integrate geometric concepts to solve occupational and practical, everyday problems (e.g., use the Pythagorean relation, right triangles, rip off corners or a paper triangle and reassemble to prove the sum of the angles equals 180°).												<b>NCTM Standard</b> Pgs. 222, 232			
<b>Text Correlation</b> Pgs. 343-350 Pgs. 430-432						<b>Rating</b> 2		<b>Additional Resources</b>							
<b>Assessment</b>  Jean plotted the main areas of her town on a grid and treated each street as if it were a coordinate marker. Jean stood in the center of town at (0, 0). She walked two blocks “up,” two blocks “right,” and two blocks “down.” Where was she?  (a) At the center of town (b) Two blocks “down” from the center of town (c) Two blocks “left” of the center of town (d) Two blocks “right” of the center of town															