Math class	Recommendations	Recommended Mathematical skills
Math 7	The <b>successful</b> <b>completion of 6th</b> <b>grade math</b> Completes the <b>"Math</b> <b>7"</b> summer math packet <b>with understanding</b>	<ul> <li>Operations with whole numbers, fractions and decimals (adding, subtracting, multiplying, dividing <b>positive numbers</b>)</li> <li>Long division</li> <li>Place value of decimals (tenths, hundredths, thousandths, etc.)</li> <li>Identify basic polygons</li> <li>Understand measures of central tendency (mean, median, mode, range)</li> <li>Probability of simple events (picking a card, rolling dice)</li> </ul>
Math 7 Honors	Mostly 4's in previous math courses Pass advance on all previous math SOLs (500+) Completes the "Math 7 Honors" summer math packet with understanding	<ul> <li>Fraction, Decimal, Percent math sense: ordering, calculating, converting</li> <li>Able to solve 1-step and 2-step equations</li> <li>Able to solve and graph one-step inequalities</li> <li>All operations with integers (adding, subtracting, multiplying, dividing)</li> <li>Proportional reasoning</li> <li>General understanding of consumer math (tax, tip, discount)</li> <li>Foundation of geometry: polygon vocabulary</li> <li>Understand measures of central tendency (mean, median, mode, range)</li> <li>Probability of an independent event</li> </ul>
Is your child ready for Math 7 Honors?	<ul> <li>Ask yourself if your child:</li> <li>Is very interested in any mathematical problems and seeks those that pose a challenge?</li> <li>Has excellent attendance and completes homework, class work and other assignments in a timely manner?</li> <li>Has developed organizational and time management skills?</li> <li>Completes the majority of their homework without additional help?</li> <li>Contributes insightful and salient points to class discussions about problems?</li> <li>Is prepared to learn and use effective strategies for approaching any mathematical problem?</li> <li>Is an <i>independent</i> learner who is eager to improve their skills?</li> <li>Responds well to constructive criticism</li> <li>Can manage the accelerated pace of the mathematics curriculum?</li> <li>Will be ready to take the math 8 SOL as a 7<sup>th</sup> grade student?</li> </ul>	

## Deciding between Math 7 or Math 7 Honors

The following compares test problems for the Math 7 level vs Math 7 Honors:

Math 7	Math 7 Honors
<ol> <li>What is the coefficient in the expression 6 – 2x ?</li> <li>2. What is the constant in the</li> </ol>	Use the expression $9x^2 - 5x - 3y + 12$ , to answer the following questions. 1. What is the constant in the expression?
expression <b>12 + 3y</b> ? 3. Which of the following is an algebraic equation? <b>a.</b> 9 + 3 = 12 <b>c.</b> 7x + 5 <b>b.</b> a + b = c <b>d.</b> 6 - 2y = 16	<ul> <li>2. How many terms are in the expression?</li> <li>3. Circle <u>all</u> of the following numbers below that are coefficients for the expression above.</li> <li>-12 3 -9 -5 5 -3 9 12</li> </ul>

<b>4.</b> 2 − 25 ÷ 5•2 + 17	4) $-2\left(\frac{5}{9} + \frac{22}{9}\right)^2 - \sqrt{49} \cdot (-2)$
6 <sup>2</sup> + (-5 + 18)	5) Evaluate if a = -3, b = 6 and c = -2 $-\sqrt{3^2 + 16} - a^2 + bc$
12 – 4 <sup>2</sup> + 8	6)
<sub>6)</sub>	Evaluate if x = -2, y = -6 and z = -9
	$\frac{-z - (y)^2 \div x}{z + 6^1}$
7. Simplify the following expression:	7. Simplify the following expression:
3 - 2a + 6 - 3b - 7	$3x^2 - 5x - 6x^2 - (-2x) + 15$
8. Simplify the following expression:	8. Simplify the following expression:
6b – 2b + 17b – (–3b)	9a - 12b - 5 + 3(4a - c) + 9b + 10



<ul> <li>15)Stephen was thinking of a number.</li> <li>The quotient of the number and 3 is</li> <li>15.</li> <li>Translate and find the number that</li> <li>Stephen is thinking of.</li> </ul>	19. A taxi cab driver charges \$5.00 for the first mile and \$1.50 for each additional mile. Which equation could be used to best represent the total cost, C , based on the total number of miles, m? a. $C = 5m + 1.5$ b. $C = 5 + 1.5m$
<ul> <li>16)A taxi company charges \$3.00 for the service and \$0.50 per mile traveled.</li> <li>How much does a ride cost if you rode the taxi for 9 miles?</li> </ul>	c. $C = 5 + 1.5(m - 1)$ d. $C = 5(m - 1) + 1.5$ 20. A cell phone company's basic plan offers 700 minutes for \$40 a month plus a charge of \$0.10 per minute for any additional minutes over the initial 700 minutes. The charge per month can be represented by the equation $C = 0.1(m - 700) + 40$ ,, where C represents the total cost, and m represents the total number of minutes. How much would the bill cost if a customer used 1,000 minutes in one month?