

**5<sup>th</sup> Grade ISAT Integration MATH**

<b>MATH FOCUS</b>	<i>ISAT Sample Items—Use as models to create math challenges.</i>
<p><b>Operations and Probability</b></p>	<p>A school has fifty teachers. Six out of every ten teachers have a pet. How many teachers have a pet?</p> <p>Anish went to sleep at 9:00 pm and woke up at 6:30 am. How long did he sleep? (Note: also requires fraction knowledge.)</p> <p>The drawing below is an input-output machine. The input is 5. What is the output (add 7, subtract 3).</p> <p>Tim’s mother put these cookies on a plate. Tim takes a cookie without looking. Which will he most likely get? (Cookies of different colors on plate&gt;)</p> <p>The spinner has 6 equal parts. What is the probability that the arrow will land in a space labeled with an odd number?</p>
<p><b>Fractions</b></p> <p><b>Decimals and percentages</b></p>	<p>Sarah runs 100 meters in 10 and sixty-two hundreds seconds. How is this written as a number?</p> <p>Which letter shows <math>\frac{3}{4}</math> on the number line?</p> <p>A pizza is cut into 8 equal pieces. Ben eats 2 pieces. Sam eats 3 pieces. What fractional part of the pizza did they eat?</p> <p>A store is having a sale. The items are 50% off regular price. About how much money is needed to buy 1 of each item at sale price?</p>
<p><b>Algebraic Thinking</b></p>	<p>What is the value of the expression below when <math>M = 4</math>?</p> <p>Mr. Smith is 36 years old. His son is 8 years old. Mrs. Smith is <math>n</math> years old. Their three ages added together equals 77. Which correctly represents this information?</p> <p>Brandon weighs 58 pounds. Nate weighs less than Brandon. If Nate weighs <math>n</math> pounds, which of these is true?</p>
<p><b>Analyzing Graphs and Data</b></p>	<p>This graph shows daily temperatures for North Town. What is the difference in the average daily temperatures for Monday and Wednesday?</p> <p>Beth recorded the highest temperature for seven days. 90, 87, 95, 93, 88, 88 degrees. What is the mean (average) temperature?</p> <p>The table shows the area in square miles for 5 states. The total number of square miles for three states is 119,156. Which 3 states are in the total?</p>
<p><b>Geometry</b></p>	<p>What is the perimeter of this figure?</p> <p>Which streets (on a diagram) do not intersect?</p> <p>What type of angle is made by the hands of the clock?</p> <p>Which two figures look congruent?</p> <p>The dimensions of a rectangular prism are shown below. What is the volume of this prism? (Volume = <math>l \times w \times h</math>)</p> <p>Which is true about the prism (answers include intersects, parallel, perpendicular lines)</p>
<p><b>Measurement</b></p>	<p>Use your centimeter ruler to answer this question. Which is closest to the perimeter of this triangle?</p> <p>What is the distance from point G to point H (on a number line).</p> <p>On Todd’s map, 1 inch = 200 miles. It is <math>5\frac{1}{4}</math> inches from Todd’s house to his friend’s house on the map. How many miles it is from Todd’s house to his friend’s house?</p>