

Task	Level
SOL 7.1a  What is $10^{-2}$ ?	Low

Task	Level
SOL 7.15  List as many statements as you can that compare and contrast the solutions to these problems:  $-3x \geq -15 \quad \text{and} \quad -3x = -15$	Medium

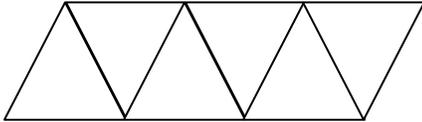
Task	Level
SOL 7.1a  Graph the following products on a number line.  $10^3 \quad 10^2 \quad 10^1 \quad 10^0 \quad 10^{-1} \quad 10^{-2} \quad 10^{-3}$  What do you notice as you graph these products? List three true statements about your graph.	Medium

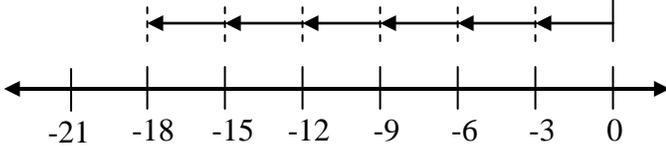
Task	Level
<p>SOL 7.3a</p> <p>The product of a negative integer and a positive integer is a negative number. Show two different models that prove this is true. Make sure you include an explanation with your models.</p>	High

Task	Level
<p>SOL 7.5c</p> <p>Three different rectangular prisms have a volume of <math>100 \text{ cm}^3</math>. Describe the length, width, and height of these prisms. Double the height in each of these prisms and calculate the volume. What pattern do you notice? Will this same pattern occur if the width or length is doubled?</p>	High

Task	Level
<p>SOL 7.5 (b)</p> <p>Give the dimensions of two different rectangular prisms that are not cubes that have the same volume as a cube having an edge length of 6 units.</p> <p>Explain why the three volumes are the same.</p> <p>-adapted from Heinemann Open-Ended Assessment</p>	High

Task	Level
<p>SOL 7.5 (b)(c)</p> <p>A box shaped like a rectangular prism has a volume of 360 cubic inches. This box has a width of 6 inches and a length of 10 inches.</p> <ol style="list-style-type: none"> <li>What is the height of the box?</li> <li>If you doubled the length, what would be the new volume?</li> </ol> <p>Explain how you found each.</p> <p>-Adapted from MCAS, Grade 8, 2011</p>	<p>Medium</p>

Task	Level
<p>SOL 7.2</p> <p>Perimeter Train</p>  <p>Make a table to record the perimeters for the first six trains. Describe the pattern in the table in words. Use the pattern to find the perimeter for a 10-triangle train.</p> <p>Write a variable expression to describe the relationship between two consecutive terms in this sequence.</p>	<p>High</p>

Task	Level
<p>SOL 7.3a</p> <p>Write two different number sentences to describe this model.</p>  <p><i>From: Adapted from EPAT practice items, VDOE, Grade 7, 2010</i></p>	<p>Medium</p>

Task	Level
<p>SOL 7.5c</p> <p>A rectangular prism had a volume of 198 cubic centimeters. The height of this prism was changed from 3 centimeters to 6 centimeters to create a new rectangular prism. The other dimensions stayed the same. What is the volume of this new prism?</p> <p><i>From: EPAT practice items, VDOE, Grade 7, 2010</i></p>	<p>Medium</p>

Task	Level
<p>SOL 7.13b</p> <p>If <math>m = -2</math>, what is the value of this expression?</p> $\frac{7m}{4} - 2m - 3$ <p><i>From EPAT practice items, VDOE, Grade 7, 2010</i></p>	<p>Low</p>

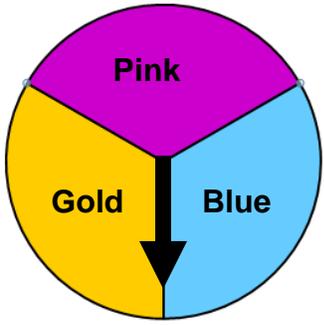
Task	Level
<p>SOL 7.10</p> <p>Rayleen has two sets of cards of identical size and shape with the colors given.</p> <p style="padding-left: 40px;">Set A has 5 green cards and 2 yellow cards.</p> <p style="padding-left: 40px;">Set B has 4 blue cards and 1 red card.</p> <p>Rayleen will randomly select one card from each set. What is the probability she will select a yellow card and a blue card.</p> <p><i>From: EPAT practice items, VDOE, Grade 7, 2010</i></p>	<p>Low</p>

Task	Level
<p>SOL 7.14b</p> <p>Write and solve an equation that represents this situation:</p> <p>Beatrice has 18 pencils. Beatrice has 2 more than 4 times the number of pencils Rick has. Exactly how many pencils does Ricky have?</p> <p><i>Adapted from EPAT practice items, VDOE, Grade 7, 2010</i></p>	<p>Medium</p>

Task	Level
<p>SOL 7.15 a and b</p> <p>Graph the solution to this inequality on a number line.</p> <p style="text-align: center;"><math>-3n &lt; 13.5</math></p> <p style="text-align: center;"><i>Adapted from EPAT practice items, VDOE, Grade 7, 2010</i></p>	<p>Low</p>

Task	Level
<p>SOL 7.1a</p> <p>What is the fraction form and decimal form for the number shown below?</p> <p>Exponential Form      Fraction Form      Decimal Form</p> <p style="text-align: center;"><math>10^{-2}</math>                      _____                      _____</p> <p><i>Adapted from EPAT practice items, VDOE, Grade 7, 2010</i></p>	<p>Medium</p>

Task	Level
<p>SOL 7.1e</p> <p>Identify each true statement.</p> <p><math>9 =  9 </math>              <math>4.1 =  -4.1 </math>              <math>-3 =  3 </math></p> <p><math> -2.6  = -2.6</math>      <math> 7  = -7</math>                      <math> -8.5  = 8.5</math></p> <p><i>From EPAT practice items, VDOE, Grade 7, 2010</i></p>	<p>Low</p>

Task	Level
<p data-bbox="235 268 357 304">SOL 7.9</p> <p data-bbox="235 342 820 378">This spinner has 3 sections of equal size.</p>  <p data-bbox="235 783 1071 924">The arrow of this spinner was spun 30 times and landed on the blue section 12 times. What is the experimental probability the arrow will land on the blue section? Your answer must be in simplest form.</p> <p data-bbox="235 961 950 997"><i>From EPAT practice items, VDOE, Grade 7, 2010</i></p>	<p data-bbox="1209 195 1291 231">Low</p>

Task	Level												
<p>SOL 7.11</p> <p>This stem-and-leaf plot represents the numbers of lollipops sold by students during a fundraiser.</p> <p style="text-align: center;"><b>Lollipops Sold</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Stem</th> <th>Leaf</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>4 4 7 8</td> </tr> <tr> <td>1</td> <td>0 0 2 3 6 6</td> </tr> <tr> <td>2</td> <td>1 5 9</td> </tr> <tr> <td>3</td> <td>0 1 2 3 5 7 8</td> </tr> </tbody> </table> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Key</th> </tr> </thead> <tbody> <tr> <td>1   4 means 14 lollipops</td> </tr> </tbody> </table> <p>Construct a histogram that could represent the same set of data.</p> <p><i>From EPAT practice items, VDOE, Grade 7, 2010</i></p>	Stem	Leaf	0	4 4 7 8	1	0 0 2 3 6 6	2	1 5 9	3	0 1 2 3 5 7 8	Key	1   4 means 14 lollipops	<p>Medium</p>
Stem	Leaf												
0	4 4 7 8												
1	0 0 2 3 6 6												
2	1 5 9												
3	0 1 2 3 5 7 8												
Key													
1   4 means 14 lollipops													

Task	Level			
<p>SOL 7.3a</p> <p>Using the key as a guide, what is the result of the operation in the model shown?</p> <div style="text-align: center; margin: 20px 0;"> </div> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Key</th> </tr> </thead> <tbody> <tr> <td>+ = </td> </tr> <tr> <td>- = </td> </tr> </tbody> </table>	Key	+ =	- =	<p>Medium</p>
Key				
+ =				
- =				

Task	Level
SOL 7.1e What is the absolute value of -9?	Low

Task	Level
SOL 7.16e Which property is represented by $7 + 0 = 7$ ?	Low

Task	Level
SOL 7.13a Write the expression which represents 8 more than the quotient and $r$ .	Low

Task	Level
SOL 7.13a Write an algebraic sentence for "10 less than 7 times a number is 5 more than 6 times that number".	Low