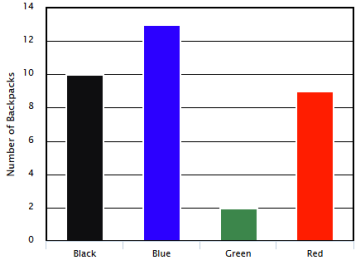

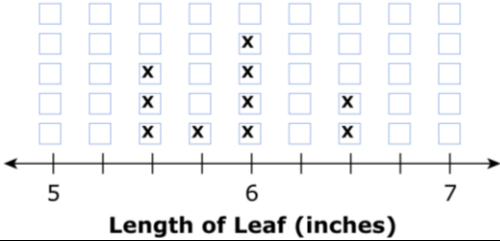
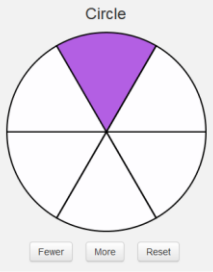
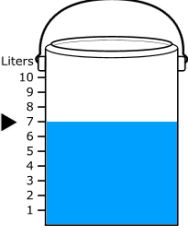


Grade 3 Mathematics Computer-Based Practice Test Answer Key














The following pages include the answer key for all machine-scored items, followed by the rubrics for the hand-scored items. – The rubrics show sample student responses. Other valid methods for solving the problem can earn full credit unless a specific method is required by the item. In items where the scores are awarded for full and partial credit, if students make a computation error, they can still earn points for reasoning or modeling.

Session 1

Item Number	Item Type	Answer Key	Number of Points	Standard												
1	SA	<p style="text-align: center;">Backpack Colors</p>  <table border="1"> <caption>Backpack Colors Data</caption> <thead> <tr> <th>Color</th> <th>Number of Backpacks</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>10</td> </tr> <tr> <td>Blue</td> <td>13</td> </tr> <tr> <td>Green</td> <td>2</td> </tr> <tr> <td>Red</td> <td>9</td> </tr> </tbody> </table>	Color	Number of Backpacks	Black	10	Blue	13	Green	2	Red	9	1	3.MD.B.03		
Color	Number of Backpacks															
Black	10															
Blue	13															
Green	2															
Red	9															
2	SA		1	3.NF.A.02												
3	SA	<p style="text-align: center;">Lengths of Oak Leaves</p> 	1	3.MD.B.04												
4	SR	C, E	1	3.OA.B.05												
5	SR	<table border="1" style="width: 100%;"> <thead> <tr> <th>Statement</th> <th>True</th> <th>False</th> </tr> </thead> <tbody> <tr> <td>The length of each side of the square tile is 5 inches.</td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> <tr> <td>The area of the square tile is 25 square inches.</td> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> <tr> <td>The design will have an area of 85 square inches. The builder will need 4 of the square tiles to make the design, without gaps or overlaps.</td> <td><input type="radio"/></td> <td><input checked="" type="radio"/></td> </tr> </tbody> </table>	Statement	True	False	The length of each side of the square tile is 5 inches.	<input checked="" type="radio"/>	<input type="radio"/>	The area of the square tile is 25 square inches.	<input checked="" type="radio"/>	<input type="radio"/>	The design will have an area of 85 square inches. The builder will need 4 of the square tiles to make the design, without gaps or overlaps.	<input type="radio"/>	<input checked="" type="radio"/>	1	3.MD.C.05
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6	SA	<p style="text-align: center;">Circle</p>  <p style="text-align: center;">Fewer More Reset</p>	1	3.G.A.02												

7	SA	 <p style="text-align: center;">Bucket</p>	1	3.MD.A.02
8	SR	B	1	3.OA.D.08

Session 2

Item Number	Item Type	Answer Key	Number of Points	Standard										
1	SA	6	1	3.OA.C.07										
2	SA	$A = $ <input type="text" value="3"/> <input type="text" value="x"/> <input type="text" value="4"/> square feet OR $A = $ <input type="text" value="4"/> <input type="text" value="x"/> <input type="text" value="3"/> square feet	1	3.MD.C.07										
3	SA	$\frac{6}{6}$	1	3.NF.A.03										
4	SA	<p style="text-align: center;">Shells Collected</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Student</th> <th>Number of Shells</th> </tr> </thead> <tbody> <tr> <td>Mary</td> <td></td> </tr> <tr> <td>Tim</td> <td></td> </tr> <tr> <td>Ethan</td> <td></td> </tr> <tr> <td>Kristen</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">Key Each  represents 4 shells.</p>	Student	Number of Shells	Mary		Tim		Ethan		Kristen		1	3.MD.B.03
Student	Number of Shells													
Mary														
Tim														
Ethan														
Kristen														
5	SA	$\begin{array}{r} 945 \\ - 298 \\ \hline 647 \end{array}$	1	3.NBT.A.02										
6	SA	4.5 inches or equivalent	1	3.MD.B.04										
7	SR	D	1	3.G.A.01										
8	CR	See Rubric	3	3.OA.B.06										

Scoring Rubric for Grade 3 Practice Test Item

#8: Part A:

Score	Description
1	Reasoning component: The student correctly identifies the error in Cindy's error. For example: "Cindy thought addition was the opposite of division."
0	Student response is incorrect or irrelevant.

Part B:

Score	Description
2	<p>Student response includes each of the following 2 elements.</p> <ul style="list-style-type: none">Reasoning component: The student explains that multiplication is the opposite of division. For example: "To find the quotient of $27 \div 9$, I need to know what number when multiplied by 9 has a product of 27.Computation component: $27 \div 9 = 3$ <p>Notes:</p> <ul style="list-style-type: none">The student does not need to use the term "unknown factor" in his or her explanation.The equation does not have to be provided to receive credit as long as the student shows clear understanding of using an unknown factor problem to find the answer to a division problem.The student may provide only the equation for the computation part.The student may earn credit for another valid explanation, such as repeated addition or subtraction.The computation may be embedded within the reasoning.
1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.