



## **Draft MCAP Practice Test Answer and Alignment Document Mathematics – Grade 3 Online Practice Test**

The following pages include the answer keys for all machine-scored items, as well as a sample top score response for hand-scored items. Please note that this document is still in draft form and will be posted to the MCAP mathematics practice test page ([support.mdassessments.com/practice-tests/math/](http://support.mdassessments.com/practice-tests/math/)) when it is fully completed. The finalized document may have slight differences from what is shown below. Until the finalized form of this document is posted, please use the contents of this document to help prepare for the MCAP mathematics assessment.

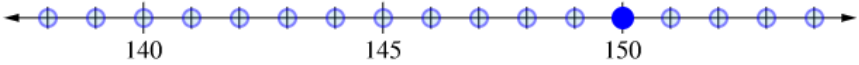
As a note:

- Constructed Response Items will show an answer key with sample student responses. Other valid methods for solving the problem can earn full credit unless a specific method is required by the item.
- In Constructed Response items where scores are awarded for full and partial credit, the definition of partial credit will be confirmed during range-finding (reviewing sets of real student work).
- If students make a computation error, they can still earn points for reasoning or modeling.

## Section 1

Item Number	Answer Key	Evidence Statement/ Content Scope								
1	C	3.MD.C.7d								
2	$\frac{1}{6}$ or equivalent	3.NF.A.2a								
3	C, D	3.M.1 3.NBT.A.2 3.M.1-1								
4	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 50%;">Is a quadrilateral</th> <th style="width: 50%;">Is <b>not</b> a quadrilateral</th> </tr> </thead> <tbody> <tr> <td><input type="radio"/></td> <td><input checked="" type="radio"/></td> </tr> <tr> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> <tr> <td><input checked="" type="radio"/></td> <td><input type="radio"/></td> </tr> </tbody> </table>	Is a quadrilateral	Is <b>not</b> a quadrilateral	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	3.G.A.1
Is a quadrilateral	Is <b>not</b> a quadrilateral									
<input type="radio"/>	<input checked="" type="radio"/>									
<input checked="" type="radio"/>	<input type="radio"/>									
<input checked="" type="radio"/>	<input type="radio"/>									
5	<p><b>Sample Top Score Response:</b></p> <p>There are 4 rows of pennies in the array so the student could make 4 stacks of pennies. Since there are 5 pennies in each row, there would be 5 pennies in each stack.</p> <p>There are 5 columns of pennies in the array, so the student could make 5 stacks of pennies. Since there are 4 pennies in each column, there would be 4 pennies in each stack.</p> <p>If I divide the array in half between the second and third rows, there would be 10 pennies in the top two rows and 10 pennies in the bottom two, so the student could make 2 stacks of pennies with 10 pennies in each stack.</p>	3.R.1 3.OA.A.2								
6	405	3.NBT.A.2								
7	C	3.M.1 3.MD.C.7b 3.M.1-3								
8	<p>The result will always be an <input type="text" value="even"/> number, and the digit in the ones place will always be <input type="text" value="0"/>.</p>	3.OA.D.9								
9	A, C	3.NF.A.3a								

## Section 2

Item Number	Answer Key	Evidence Statement/ Content Scope
1	A	3.OA.A.1
2		3.NBT.A.1
3	C, E	3.R.3 3.OA.B.5
4	B	3.NF.A.3d
5	<p><b>Sample Top Score Response:</b></p> <p><b>Part A</b></p> <p>The number of labels that Rafael needs is found by calculating the area of the board. The area is calculated by multiplying the length by the width of the board. The length is 12 inches and the width is 8 inches. The area, in square inches, of the board is <math>8 \times 12 = 96</math>. The area, in square inches, of each label is <math>1 \times 1 = 1</math>. The number of labels needed to cover the board is 96.</p> <p><b>Part B</b></p> <p>The least number of packages of labels is found by dividing the number of labels by the number of labels in each package. Rafael needs 96 labels. There are 6 labels in each package. <math>96 \div 6 = 16</math> So, Rafael needs 16 packages of labels.</p>	3.M.1 3.MD.C.7b 3.M.1-4
6	$\frac{2}{3}$ or equivalent	3.NF.A.2b
7	<p>The student should have <input type="text" value="multiplied 8 by 2"/> , then</p> <p><input type="text" value="multiplied 10 by 2"/> , and then added the two products.</p>	3.R.2 3.MD.D.8
8	B, D	3.OA.B.5
9	A	3.MD.B.3

### Section 3

Item Number	Answer Key	Evidence Statement/ Content Scope
1	C	3.MD.A.2
2	A	3.OA.A.2
3	$4 \times 9$	3.M.1 3.OA.A.1 3.M.1-3
4	A, B, D	3.NF.A.3b
5	<p><b>Sample Top Score Response:</b></p> <p>There are 9 supply boxes and each box will need 6 colored markers, so the equation <math>6 \times 9 = 54</math> means that the teacher needs a total of 54 colored markers to fill the supply boxes.</p> <p>The teacher needs 54 colored markers and the teacher already had 15 colored markers, so the equation <math>54 - 15 = 39</math> means that the teacher needs 39 more colored markers to fill the supply boxes.</p> <p>The teacher's thinking is correct.</p>	3.R.4 3.OA.A.3-1
6	2	3.NF.A.3c
7	C	3.M.1 3.OA.A.3-2 3.M.1-2
8	B, D	3.MD.D.8
9	$8 \times \boxed{6} = 48$ $\boxed{7} = 21 \div 3$ $45 \div 9 = \boxed{5}$	3.OA.C.7-2

## Section 4

Item Number	Answer Key	Evidence Statement/ Content Scope
1	D	3.OA.A.3-2
2	$\frac{3}{8}$ or equivalent	3.NF.A.1
3	D	3.R.4 3.OA.A.3-1
4	C, E	3.OA.C.7-1
5	<p>Sample Top Score Response:</p> <p>The area of the smaller rectangle that is <math>8 \times 6</math> is 48 square feet.</p> <p>The area of the larger rectangle that is <math>10 \times 9</math> is 90 square feet.</p> <p>The area of both rectangles is <math>48 + 90 = 138</math> square feet.</p>	3.M.1 3.MD.D.8 3.M.1-4
6	B	3.G.A.2
7	<p>The point on the number line can be used to show that <math>\frac{8}{8} = 1</math> and <math>\frac{1}{1} = 1</math>.</p>	3.R.1 3.NF.A.3c
8	C	3.MD.C.7b