

Grade 3 Mathematics Paper-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.

Item Number	Answer Key	Standard
1	B	3.NF.2
2	B	3.OA.8
3	6	3.OA.7
4	B	3.MD.3
5	A, C, E	3.G.2
6	<i>See rubric</i>	3.MD.8
7	D	3.G.1
8	C	3.NF.3
9	D	3.MD.4
10	Part A: 880 Part B: 32	3.NBT.2
11	C, E	3.OA.5
12	<i>See rubric</i>	3.OA.6

Rubrics start on the next page.

Scoring Rubric for Grade 3 Practice Test Item #6:

Score	Description
2	The student response demonstrates an exemplary understanding of the Measurement and Data concepts involved in solving real world problems involving perimeter of polygons, including finding the perimeter given the side lengths and exhibiting rectangles with the same perimeters and different areas.
1	The student response demonstrates a fair understanding of the Measurement and Data concepts involved in solving real world problems involving perimeters of polygons, including finding the perimeter given the side lengths and exhibiting rectangles with the same perimeters and different areas. While some aspects of the task are completed correctly, others are not. The mixed evidence provided by the student merits 1 point.
0	The student response contains insufficient evidence of an understanding of Measurement and Data concepts involved in solving real world problems involving perimeters of polygons, including finding the perimeter given the side lengths and exhibiting rectangles with the same perimeters and different areas to merit any points.

Sample Response:

a. 26 (feet), $7+6+7+6=26$

b. Area of Ms. Shaw's quilt is 42, $7 \times 6 = 42$

any of the following dimensions:

1×12 , $1+12+1+12=26$, area = 12

2×11 , $2+11+2+11=26$, area = 22

3×10 , $3+10+3+10=26$, area = 30

4×9 , $4+9+4+9=26$, area = 36

5×8 , $5+8+5+8=26$, area = 40

Scoring Rubric for Grade 3 Practice Test Item #12:

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.