LEAP 360
Mathematics Diagnostic Grade 4 Scoring Guide
Mathematics
Grade 4

In participating districts, all students in grades 3–8, and high school Algebra I and Geometry, will take the LEAP 360 mathematics diagnostic assessments, which are designed to:

- identify the specific prerequisite skills individual students or groups of students need in order to be successful with major content for the current grade;
- help teachers to understand student performance on previous grade-level content that is prerequisite knowledge for the current grade; and
- assist teachers with meaningful, yet ambitious, goal setting for student learning targets.

The purpose of this Scoring Guide is to provide teachers with the necessary information, guidance, and tools to score and interpret students' responses to Reasoning (Type II) and Modeling (Type III) Constructed-Response (CR) items that align to Louisiana Student Mathematics Standards. The CRs, scoring rubrics, and numerous samples of student responses have been selected to ensure that teachers score actual responses fairly, accurately, and consistently.

This document provides the scoring information and practice scoring exercise for the two CRs in the Grade 4 Diagnostic Mathematics assessment:

- **Item 31: Reasoning**
- **Item 43: Modeling**

There are 8 anchor papers selected to illustrate the types of student responses that earn each possible number of points, or score, for each item. Each anchor paper is annotated to describe the rationale for the earned score. Scorers should:

- Review the alignment of the item (Evidence Statement and Standard[s]) as well as the metadata (Point Value, Depth of Knowledge [DOK], and Difficulty).
- Review the item.
- Review the rubric.
- Read each bullet point and each score point descriptor carefully.
- Read the student work and annotated scoring notes for each anchor paper.
Task Type: Reasoning (Type II)

Evidence Statement: LEAP.II.4.5: Distinguish correct explanation/reasoning from that which is flawed, and – if there is a flaw in the argument – present corrected reasoning. (For example, some flawed 'student' reasoning is presented and the task is to correct and improve it.)

Content Scope: Knowledge and skills articulated in 3.OA.B, 3.NF, 3.MD.C

Primary Standard: 3.NF.A.3: Explain equivalence of fractions with denominators 2, 3, 4, 6, and 8 in special cases, and compare fractions by reasoning about their size.
   d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

Point Value: 3
DOK: 2
Difficulty: Medium
Mathematics
Grade 4, Item 31
Constructed-Response Item

An incomplete comparison is shown.

\[
\begin{array}{c}
\frac{3}{8} \square \frac{3}{4}
\end{array}
\]

Adam thinks that the comparison will be complete and true as \( \frac{3}{8} > \frac{3}{4} \) because \( 8 > 4 \), but Adam made a mistake in his thinking.

Part A
Describe the mistake Adam made in his thinking.

Part B
Using <, =, or >, complete the comparison to make it true. Explain how you know your comparison is true.

\[
\begin{array}{c}
\frac{3}{8} \square \frac{3}{4}
\end{array}
\]
Mathematics
Grade 4, Item 31
Scoring Information

Part A (1 point)
- Correct description of mistake made (1 point)

Sample Student Response:
Adam compared the denominators of the fractions as if they were whole numbers, instead of comparing the number of parts of a whole.

Part B (2 points)
- Correct comparison using symbolic notation (1 point)
- Valid explanation of why comparison is true (1 point)

\[
\frac{3}{8} < \frac{3}{4}
\]

Sample Student Response:
The equal-sized parts of a whole that is divided into 8 are smaller than the equal-sized parts of a whole that is divided into 4, so 3 of the smaller parts are less than 3 of the larger parts, and the comparison is true.

OR

I know that \( \frac{3}{4} = \frac{6}{8} \). I can compare \( \frac{3}{8} \) and \( \frac{6}{8} \) as \( \frac{3}{8} < \frac{6}{8} \) because the denominators are both 8, which means that each whole is divided into the same 8 equal-sized parts. Since the comparison \( \frac{3}{8} < \frac{6}{8} \) is true, \( \frac{3}{8} < \frac{3}{4} \) is true.

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>The student earns 3 points.</td>
</tr>
<tr>
<td>2</td>
<td>The student earns 2 points.</td>
</tr>
<tr>
<td>1</td>
<td>The student earns 1 point.</td>
</tr>
<tr>
<td>0</td>
<td>The student’s response is incorrect, irrelevant to the skill or concept being measured, or blank.</td>
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</table>
The sample Grade 4, Item 31, student responses—or *anchor set*—included in this section of the Scoring Guide are provided to ensure that teachers understand how to apply the rubrics reliably and consistently. The anchor set includes annotated references to both the rubric and specific examples from the response to exemplify why the response received a particular score.
Anchor Paper #1

Part B
\[
\frac{3}{8} < \frac{3}{4}
\]
\[
\frac{3}{4} \text{ is more than half}
\]
\[
\frac{3}{8} \text{ is less than half}
\]
so \(\frac{3}{4}\) is bigger.

Part A
Adam only went by the denominators. The denominators do not always tell you the answer. You have to look at the denominator and numerators to find the answer. Even though \(8 > 4\) \(\frac{3}{8} < \frac{3}{4}\). The reason is \(\frac{3}{8}\) is less than half. \(\frac{3}{4}\) is more than half.

Score Information: 3

The response to Part A includes a correct description of the mistake made (1). The response to Part B includes a correct comparison using symbolic notation (1) and a valid explanation of why the comparison is true (1).
Part B

\[\frac{3}{6} \square \frac{3}{4}\]

\(\frac{3}{4}\) is more than half
\(\frac{3}{8}\) is less than half
so \(\frac{3}{4}\) is bigger.

Part A

Adam only went by the denominators. The denominators do not always tell you the answer. You have to look at the denominator and numerators to find the answer. Even though \(\frac{3}{4}\) \(\frac{3}{6}\), the reason is \(\frac{3}{8}\) is less than half, \(\frac{3}{4}\) is more than half.
Anchor Paper #2

A. 8 is bigger than 4 but Adam is just looking at the denominators and not the numerator, which would change the answer.

B. \( \frac{3}{4} > \frac{3}{8} \)

\( \frac{3}{4} \) is bigger of a larger fraction than \( \frac{3}{8} \). This is true because two equal size rectangles can show the fractions. In one rectangle 3 of the 4 equal size pieces would be filled in, and the other rectangle 3 of the 8 equal size pieces would be filled in. And the rectangle with \( \frac{3}{4} \) has more filled in than the rectangle with \( \frac{3}{8} \).

Score Information: 3

The response to Part A includes a correct description of the mistake made (1). The response to Part B includes a correct comparison using symbolic notation (1) and a valid explanation of why the comparison is true (1).
A. 8 is bigger than 4 but Adam is just looking at the denominators and not the numerator, which would change the answer.

B. \[ \frac{3}{4} > \frac{3}{8} \]

\[ \frac{3}{4} \text{ is bigger on a larger fraction than } \frac{3}{8}. \] This is true because \( \frac{3}{4} \) has more filled in than \( \frac{3}{8} \).
Anchor Paper #3

$$\frac{12}{32} = \frac{3}{8} < \frac{3}{4} = \frac{24}{32}$$

The mistake was Adam only compared 8 and 4.

The comparison is true b/c $\frac{3}{4}$ is closer to one whole.

Score Information: 2

The response to Part A includes an incomplete description of the mistake made (0). The response to Part B includes a correct comparison using symbolic notation (1) and a valid explanation of why the comparison is true (1).
\[ \frac{12}{32} < \frac{3}{4} = \frac{24}{32} \]

The mistake was Adam only compared 8 and 4.

The comparison is true b/c

\[ \frac{3}{4} \] is closer to one whole.
Anchor Paper #4

\[ \frac{3}{8} < \frac{3}{4} \]  
because the larger the denominator, the smaller the fraction.

The mistake Adam made was that he was using an equation for whole numbers; not fractions.

Score Information: 2

The response to Part A includes a correct description of the mistake made (1). The response to Part B includes a correct comparison using symbolic notation (1), but no valid explanation of why the comparison is true (0).
\[ \frac{3}{8} < \frac{3}{4} \] because the larger the denominator, the smaller the fraction. The mistake Adam made was that he was using an equation for whole numbers, not fractions.
Anchor Paper #5

Part A
Adam I disagree with you because even though 8 is greater than 4, when you compare you do not compare the denominator.

Part B.
\[ \frac{3}{8} \text{ is less than } \frac{3}{4} \]. I know this because an equivalent fraction to \( \frac{3}{4} \) is \( \frac{6}{8} \). I know this because \( \frac{3}{4} \) multiplied by \( \frac{2}{2} \) equals \( \frac{6}{8} \). And \( \frac{6}{8} \) is greater than \( \frac{3}{8} \).

Score Information: 1

The response to Part A includes an incorrect description of the mistake made (0). The response to Part B includes a correct comparison, but without symbolic notation (0), and a valid explanation of why the comparison is true (1).
Part A
Adam and I disagree with you because even though 8 is greater than 4, when you compare you do not compare the denominator.

Part B.
\(\frac{3}{8}\) is less than \(\frac{3}{4}\). I know this because an equivalent fraction to \(\frac{3}{4}\) is \(\frac{6}{8}\). I know this because it multiplied by \(\frac{1}{2}\) equals \(\frac{6}{8}\) and \(\frac{6}{8}\) is greater than \(\frac{3}{8}\).
### Anchor Paper #6

<table>
<thead>
<tr>
<th>A</th>
<th>The mistake that Adam made is that if there is a bigger number on the bottom means it is smaller.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>$\frac{3}{8} &lt; \frac{3}{4}$</td>
</tr>
<tr>
<td></td>
<td>$\frac{3}{8}$ is less than $\frac{3}{4}$ because 8 is greater than 4.</td>
</tr>
</tbody>
</table>

### Score Information: 1

The response to Part A includes an incomplete description of the mistake made (0). The response to Part B includes a correct comparison using symbolic notation (1), but an incomplete explanation of why the comparison is true (0).
The mistake that Adam made is that if there is a bigger number on the bottom, it means it is smaller.

\[
\frac{3}{8} < \frac{3}{4}
\]

\[
\frac{3}{8} \text{ is less than } \frac{3}{4} \text{ because } 8 \text{ is greater than } 4.
\]
Anchor Paper #7

\[
\frac{3}{8} = \frac{3}{4}
\]

I know this because \(2 \times 4 = 8\) and 8 is equal to 4 so thats how I know.

His mistake is the fact that he thinks that \(\frac{3}{8} > \frac{3}{4}\).

Score Information: 0

The response to Part A includes an incorrect description of the mistake made (0). The response to Part B includes an incorrect comparison using symbolic notation (0) and an incorrect explanation of why the comparison is true (0).
\[
\frac{3}{8} = \frac{3}{4}
\]

I know this because \(2 \times \frac{3}{4} = \frac{6}{4}\), and \(\frac{6}{4}\) is equivalent to 1, so this is how I know it.

He thinks that \(\frac{3}{8} > \frac{3}{4}\).
Anchor Paper #8

\[
\begin{align*}
3 \times 10 & = 30 \\
8 \times 10 & = 80 \\
3 \times 10 & = 30 \\
4 \times 10 & = 40
\end{align*}
\]

\[
\frac{3}{8} \text{ and } \frac{3}{4}, \text{ both } \frac{1}{3}.
\]

Score Information: 0

The response to Part A is missing (0). The response to Part B includes no correct comparison using symbolic notation (0) and an incorrect explanation of why the comparison is true (0).
\[
\frac{3 \times 10}{8 \times 10} = \frac{30}{80} \quad \frac{8 \times 16}{4 \times 10} = \frac{30}{40}
\]

\[
\frac{3}{4} \text{ and } \frac{3}{14}
\]

\[
\frac{1}{3}
\]
Mathematics
Grade 4, Item 31
Practice Scoring Exercise

Five (5) sample responses have been selected and presented here to help scorers calibrate their expectations and judgments and to ensure student responses are accurately and consistently scored. Scorers should:

- Review the rubric again.
- Read each bullet point and each score point descriptor carefully.
- Read each sample response.
- Give each sample response a score based on the rubric.
- Compare your scores with the key, noting any differences in how the responses were scored.
- Begin scoring student responses when confident that the rubric can be applied accurately and consistently.
<table>
<thead>
<tr>
<th>Paper</th>
<th>Score</th>
<th>Justification for Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td></td>
<td></td>
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<tr>
<td>#2</td>
<td></td>
<td></td>
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<td>#3</td>
<td></td>
<td></td>
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<tr>
<td>#4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
His mistake is you don't have to compare the denominator, you need to compare the numerator. The correct comparison is $\frac{3}{8} < \frac{3}{4}$ because $\frac{3}{4}$ is greater than its half and $\frac{3}{8}$ is less than its half.
He is wrong because he used the less than sign for 3 and that 8 he made his mistake in his problem.

Part B

The true answer is $\frac{3}{4} \times 3$ less than $\frac{2}{3}$. 
For part A, the mistake was that \( \frac{3}{8} \) has more pieces making \( \frac{3}{4} \) larger.

\[ \frac{3}{8} \boxed{\frac{3}{4}} \]

I know because 7 is closer to 4 than 8.
Part A

The mistake that Adam made was when he cross multiplied, he went by the largest number. What he should of did was went by the smallest number.

Part B

\[ \frac{3}{2} \times 3 = 9 \]
I used the butterfly method. $\frac{3}{3}$ has 24 and $\frac{3}{8}$ has 2.24. 24 is higher than 22.
## Mathematics

**Grade 4, Item 31**

### Practice Scoring Exercise Key

<table>
<thead>
<tr>
<th>Paper</th>
<th>Score</th>
<th>Justification for Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>2</td>
<td>The response to Part A includes an incorrect description of the mistake made (0). The response to Part B includes a correct comparison using symbolic notation (1) and a valid explanation of why the comparison is true (1).</td>
</tr>
<tr>
<td>#2</td>
<td>0</td>
<td>The response to Part A includes an incorrect description of the mistake made (0). The response to Part B includes an incorrect comparison, without symbolic notation (0) and no valid explanation of why the comparison is true (0).</td>
</tr>
<tr>
<td>#3</td>
<td>3</td>
<td>The response to Part A includes a correct description of the mistake made (1). The response to Part B includes a correct comparison using symbolic notation (1) and a valid explanation of why the comparison is true (1).</td>
</tr>
<tr>
<td>#4</td>
<td>0</td>
<td>The response to Part A includes an incomplete description of the mistake made (0). The response to Part B includes an incorrect comparison using symbolic notation (0) and no valid explanation of why the comparison is true (0).</td>
</tr>
<tr>
<td>#5</td>
<td>1</td>
<td>The response to Part A is missing (0). The response to Part B includes a correct comparison using symbolic notation (1), but an incomplete explanation of why the comparison is true (the explanation does not address the denominator) (0).</td>
</tr>
</tbody>
</table>
Mathematics Grade 4, Item 43 Alignment

Task Type: Modeling (Type III)

Evidence Statement: LEAP.III.4.2: Solve multi-step contextual problems with degree of difficulty appropriate to Grade 4, requiring application of knowledge and skills articulated in 3.OA.A, 3.OA.8, 3.NBT, and/or 3.MD.

Primary Standard: 3.OA.A.1: Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as $5 \times 7$.

Secondary Standard: 3.OA.A.3: Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Point Value: 3
DOK: 2
Difficulty: Medium
Molly and Percy each have some buttons. This picture shows the buttons each person has.

**Part A**
Which expression can be used to find the total number of buttons Molly has?

A. $8 + 4$
B. $8 - 4$
C. $8 ÷ 4$
D. $8 \times 4$

**Part B**
What is the difference between the number of buttons Percy has and the number of buttons Molly has? Show your work using equations.
Mathematics
Grade 4, Item 43
Scoring Information

Part A (1 point)
Answer Key: D
Rationale A: selected symbol for addition instead of multiplication
Rationale B: selected symbol for subtraction instead of multiplication
Rationale C: selected symbol for division instead of multiplication
Rationale D: correct

Part B (2 points)
• Correct answer (1 point)
• Valid work, including use of equations (1 point)

3 (buttons)

Sample Student Response:
Molly has 32 buttons because $8 \times 4 = 32$. Percy has 35 buttons because $5 \times 7 = 35$. Since $35 - 32 = 3$, Percy has 3 more buttons than Molly has.

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>The student earns 3 points.</td>
</tr>
<tr>
<td>2</td>
<td>The student earns 2 points.</td>
</tr>
<tr>
<td>1</td>
<td>The student earns 1 point.</td>
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<tr>
<td>0</td>
<td>The student’s response is incorrect, irrelevant to the skill or concept being measured, or blank.</td>
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</table>
Mathematics
Grade 4, Item 43
Anchor Set

The sample Grade 4, Item 43, student responses—or anchor set—included in this section of the Scoring Guide are provided to ensure that teachers understand how to apply the rubrics reliably and consistently. The anchor set includes annotated references to both the rubric and specific examples from the response to exemplify why the response received a particular score.
Anchor Paper #1

A. \(8 + 4 = 12\)
B. \(8 - 4 = 4\)
C. \(8 \div 4 = 2\)
D. \(8 \times 4 = 32 \Rightarrow \text{choice D}\)

\[8 \times 4 = 32\]
\[7 \times 5 = 35\]
\[35 - 32 = 03\]

The difference is 3.

Score Information: 3

The response to Part A is correct (1). The response to Part B includes the correct answer (1) and shows valid work using equations (1).
A: $8 + 4 = 12$
B: $8 - 4 = 4$
C: $8 \div 4 = 2$

- $8 \times 4 = 32$
- $8 \times 4 = 32$
- $7 \times 5 = 35$

The difference is 3.
Anchor Paper #2

In part A I counted the width and length and got 4 an 8 and multiplied them to get the answer $8 \times 4$.

In part B I multiplied Percy’s number of buttons to get 35. I multiplied Molly’s number of buttons to get 32. I subtracted the two total’s to get the answer 3.

$5 \times 7 = 35$
$8 \times 4 = 32$
$35 - 32 = 3$

The difference is 3.

Score Information: 3

The response to Part A is correct (1). The response to Part B includes the correct answer (1) and shows valid work using equations (1).
In part A I counted the width and length and got 4 on 8 and multiplied them to get the answer 8x4.

In part B I multiplied Percy's number of buttons to get 35. I multiplied Molly's number of buttons to get 32. I subtracted the two totals to get the answer 3.

\[ 5 \times 7 = 35 \quad 8 \times 4 = 32 \quad 35 - 32 = 3 \]

The difference is 3.
Anchor Paper #3

Part A
D

Part B
M \(8 \times 4 = 32\)
P \(4 \times 7 = 28\)

\(32 - 28 = 04\)

The difference between both of their numbers is 4.

Score Information: 2

The response to Part A is correct (1). The response to Part B includes an incorrect answer due to a computation error (0), but shows valid work using equations (1).
Molly and Percy each have some buttons. This picture shows the buttons each person has.

Part A
Which expression can be used to find the total number of buttons Molly has?

A. 8 + 4  
B. 8 – 4  
C. 8 ÷ 4  
D. 8 × 4  

Part B
What is the difference between the number of buttons Percy has and the number of buttons Molly has? Show your work using equations.

Part B
M \( \times 4 = 32 \)  
\( 8 \times 4 = 32 \)  
M \( \times 4 = 28 \)  
\( 4 \times 4 = 28 \)  

The difference between both of their numbers is 4.
Anchor Paper #4

Part A
D

Part B
Percy did \(5 \times 7 = 35\)

Score Information: 2

The response to Part A is correct (1). The response to Part B includes an incomplete answer (0), but shows some valid work using equations (1).
Part A
Which expression can be used to find the total number of buttons Molly has?

A. $8 + 4$
B. $8 - 4$
C. $8 + 4$
D. $8 \times 4$

Part B
What is the difference between the number of buttons Percy has and the number of buttons Molly has? Show your work using equations.

\[
\begin{align*}
\text{Percy} & \quad \text{did} \\
9 \times 7 & = 63
\end{align*}
\]
Anchor Paper #5

<table>
<thead>
<tr>
<th>Part A</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part B</td>
<td>$32 - 34 = 2$</td>
</tr>
</tbody>
</table>

**Score Information: 1**

The response to Part A is correct (1). The response to Part B includes an incorrect answer due to a computation error (0) and shows incomplete and incorrect work using equations (0).
Part A
Which expression can be used to find the total number of buttons Molly has?

A. $8 + 4$
B. $8 - 4$
C. $8 \div 4$
D. $8 \times 4$

Part B
What is the difference between the number of buttons Percy has and the number of buttons Molly has? Show your work using equations.

$$
\begin{array}{c}
32 \\
-34 \\
\hline
\frac{2}{2}
\end{array}
$$
Anchor Paper #6

Part A
8 ÷ 4

Part B
35 – 32 = 03 more buttons

Score Information: 1

The response to Part A is incorrect (0). The response to Part B includes the correct answer (1), but shows incomplete work using equations (0).
Part A
Buttons $\frac{8}{4}$

Part B
35
$-32$
\[\frac{03}{03} \text{ more buttons}\]
Anchor Paper #7

on part A you have to add $8 + 4$ thoughter.

on part B you have to subchraked percys button’s to Molly’s button’s.

Score Information: 0

The response to Part A is incorrect (0). The response to Part B includes no correct answer (0) and shows no valid work using equations (0).
On part A you have to add 8 + 4 together.

On part B you have to subtract Percy's button's to Molly's buttons.
Anchor Paper #8

<table>
<thead>
<tr>
<th>Part A</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percy has two more than Molly</td>
</tr>
</tbody>
</table>

Score Information: 0

The response to Part A is incorrect (0). The response to Part B includes an incorrect answer (0) and shows no valid work using equations (0).
Anchor Paper #8

Part A
Which expression can be used to find the total number of buttons Molly has?

A. $8 + 4$
B. $8 - 4$
C. $8 - 4$
D. $8 \times 4$

Part B
What is the difference between the number of buttons Percy has and the number of buttons Molly has? Show your work using equations.

Percy has two more than Molly.
Mathematics
Grade 4, Item 43
Practice Scoring Exercise

Five (5) sample responses have been selected and presented here to help scorers calibrate their expectations and judgments and to ensure student responses are accurately and consistently scored. Scorers should:

- Review the rubric again.
- Read each bullet point and each score point descriptor carefully.
- Read each sample response.
- Give each sample response a score based on the rubric.
- Compare your scores with the key, noting any differences in how the responses were scored.
- Begin scoring student responses when confident that the rubric can be applied accurately and consistently.
# Mathematics Grade 4, Item 43, Practice Scoring Exercise

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<td></td>
<td></td>
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<tr>
<td>#4</td>
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<td></td>
</tr>
<tr>
<td>#5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Practice Paper #1

Part A

Part B

\[ \frac{8 \times 4}{32} \]

\[ \frac{5 \times 7}{35} - \frac{32}{3} \]
Practice Paper #2

**Part A**
Which expression can be used to find the total number of buttons Molly has?

A. $8 + 4$
B. $8 - 4$
C. $8 \div 4$
D. $8 \times 4$

**Part B**
What is the difference between the number of buttons Percy has and the number of buttons Molly has? Show your work using equations.

\[ \begin{align*}
35 - 7 & = 28 \\
\text{Percy has 7 fewer buttons} \\
\end{align*} \]
Practice Paper #3

Part A

D. 8 x 4

Part B

Percy: 7 x 5 = 35
Molly: 8 x 4 = 32

35 > 32
Mathematics, Diagnostic Grade 4

Practice Paper #4

Part B

5 \times 7 = 35

8 \times 4 = 32

Part A

D

Percy has 3 more buttons than Molly.
Part A: Who has more buttons?

I got the answer multiplying 8x4 I got 32 and there was 32 buttons.

Part B: The difference is Molly has 32 buttons and Percy has 35 buttons. The real difference is Percy has lesser buttons than Molly.
# Practice Scoring Exercise Key

<table>
<thead>
<tr>
<th>Paper</th>
<th>Score</th>
<th>Justification for Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>3</td>
<td>The response to Part A is correct (1). The response to Part B includes the correct answer (1) and shows valid work using equations (1).</td>
</tr>
<tr>
<td>#2</td>
<td>0</td>
<td>The response to Part A is incorrect (0). The response to Part B includes an incorrect answer due to a computation error (0) and shows incomplete and incorrect work using equations (0).</td>
</tr>
<tr>
<td>#3</td>
<td>2</td>
<td>The response to Part A is correct (1). The response to Part B includes an incomplete answer (0), but shows valid work using equations (1).</td>
</tr>
<tr>
<td>#4</td>
<td>3</td>
<td>The response to Part A is correct (1). The response to Part B includes the correct answer (1) and shows valid work using equations (1).</td>
</tr>
<tr>
<td>#5</td>
<td>1</td>
<td>The response to Part A is correct (1). The response to Part B includes no correct answer (0) and shows no valid work using equations (0).</td>
</tr>
</tbody>
</table>