



# How to determine Months of Growth with Momentum Math for Learning Assistance Program (LAP) reporting

## Overview

Momentum Math is an adaptive, norm-referenced assessment solution that provides diagnostic and progress monitoring data three times a year to inform instruction and monitor student growth. Easy-to-read reports not only pinpoint each student's unique strengths and challenges, but also provide targeted instructional recommendations and assignable personalized content from the Momentum Math Concept Library. In grades K-8, new Quantile<sup>®</sup> measure reporting provides even greater insight into student achievement, including the ability to forecast end-of-year performance.

Momentum Math is available for Grades K-8 and Algebra 1 in English and Spanish. A Momentum Math Algebra 1 Readiness Screener is also available. Momentum Math offers full integration with Savvas core math curriculum, including *enVision<sup>®</sup> Mathematics* and *Experience Math<sup>®</sup>*.

*Momentum Math provides:*

- Adaptive, norm-referenced assessments that have been field tested to ensure valid, reliable results
- Streamlined diagnostic assessments for the beginning (BOY), middle (MOY), and end (EOY) of the year
- Easy-to-read reporting aligned with your state standards and your Savvas core math curriculum
- Targeted instructional recommendations identifying each student's unique strengths and challenges, as well as instructional next steps
- Assignable personalized resources from the Momentum Math Concept Library or your Savvas core math curriculum
- Convenient all-in-place access on the award-winning Savvas Realize<sup>®</sup> platform

## LAP Reporting based on Momentum Math

This document is intended to help districts using Momentum Math determine three elements needed for the state's Comprehensive Education Data and Research System (CEDARS) in Student Growth File (Q):

- Q09 - Amount of Academic Growth
- Q11 - Beginning Score
- Q12 - Date of Beginning Score
- Q13 - End Score
- Q14 - Date of End Score

## Q09 – Amount of Academic Growth

Amount of Academic Growth is reported for every student participating in LAP for 14 days or longer, using **Months of Growth** as a consistent measure. The values can range from 0 to 20+ months, and may be calculated based on these values from Momentum Math K-8:

- BOY performance level
- Growth
- Typical Monthly Growth

Step-by-step instructions for how to calculate Months of Growth for element Q09 are shown below.

## BOY performance level

Administrators can drill-in to see student details from any Momentum Math dashboard in Realize Reports by clicking on any graphic of overall performance. For each student, the scale scores under each BOY column are color-coded to represent one of four performance levels:

- Red** - Does Not Meet expectations
- Yellow** - Approaching expectations
- Green** - Meets expectations
- Purple** - Exceeds expectations

The image below is an example of what the student details might look like toward the end of the school year, after all three Momentum Math diagnostics have been administered (BOY, MOY, and EOY).

Student name	Program	Grade	School	Teacher	Class	BOY	MOY	EOY	Growth
Anna Rosser	Grade 1	Grade 1	Lakewood Elem...	Alena Herwitz	Class Name Here	1249	1119	1076	↑ 124
Aspen Dias	Grade 1	Grade 1	School Name H...	Livia Siphron	Class Name Here	1274	1490	1576	↑ 34
Cheyenne Bator	Grade 1	Grade 1	Lakewood Elem...	Alena Herwitz	Class Name Here	1290	1380	1478	↑ 188
Craig Bator	Grade 1	Grade 1	Lakewood Elem...	Alena Herwitz	Class Name Here	1452	Unassigned	Unassigned	N/A
Haylie Rosser	Grade 1	Grade 1	School Name H...	Livia Siphron	Class Name Here	Unassigned	Unassigned	Unassigned	N/A
Jocelyn Press	Grade 1	Grade 1	School Name H...	Livia Siphron	Class Name Here	1452	1452	1452	0
Maria Dias	Grade 1	Grade 1	Lakewood Elem...	Alena Herwitz	Class Name Here	1452	1470	1432	↓ 20
Martin Rosser	Grade 1	Grade 1	School Name H...	Livia Siphron	Class Name Here	1452	1490	1576	↑ 90
Miracle Herwitz	Grade 1	Grade 1	Lakewood Elem...	Alena Herwitz	Class Name Here	1452	1490	1576	↑ 90
Omar Philips	Grade 1	Grade 1	Lakewood Elem...	Alena Herwitz	Class Name Here	1452	1490	1576	↑ 12

In this example, Aspen Dias took Momentum Math BOY as part of the LAP program in Grade 1, resulting in a BOY performance level of yellow "Approaching." Looking a bit further down at Aspen's twin sister, Maria Dias, we see she was in the red "Does not meet" BOY performance level.

## Growth

Momentum Math for K-8 uses a vertical scale that enables growth comparisons both within a single year and across multiple years. Each time a student completes a BOY, MOY, or EOY Diagnostic assessment, they receive a scale score. When these three Diagnostics are administered around four months apart, the resulting scale scores offer a reliable measure of student growth over time. Growth is determined by the difference between these scores, reflecting progress along a continuous scale. Any negative Growth should be recorded as 0 because the drop is more likely due to measurement error than student regression.

*In our example above, we can see in the last column that Aspen's Growth from BOY to EOY was 34 scale score points. However, Maria's performance dropped from BOY to EOY, represented by a Growth of -20. For LAP recording purposes, we will say Maria had a Growth measure of 0.*

## Typical Monthly Growth

Each student progresses along an individual growth path, and consistent movement across all 10 months of the school year is not expected. However, we can look at how students tended to grow over time on similar assessments and compare actual growth to that typical monthly growth.

To determine Typical Monthly Growth, first look in the table below for the row with a student's assessed (program) Grade. Then on that row, go to the color-coded column for that student's BOY performance level. The number within that cell is the median growth for similar students in the same program grade and BOY performance level, called the "Typical Monthly Growth."

Program Grade	BOY Performance Level		
	Does Not Meet	Approaching	Meets EOY
K	6.5	4.7	3.8
1	4.8	5.6	6.5
2	8.0	7.9	7.9
3	8.6	7.7	6.6
4	8.1	7.8	7.9
5	5.8	5.2	5.1
6	5.5	4.3	3.6
7	4.5	4.4	3.8
8	3.2	2.0	1.9

*For example, Aspen Dias was in Grade 1 in the student details report above and was at the yellow "Approaching" BOY performance level. To look up Typical Monthly Growth for students like Aspen, we would go to the Grade 1 row and look under the yellow "Approaching" column to find "5.6." Maria Dias also was in Grade 1 and was at the red "Does Not Meet" BOY performance level. We can see that her peers who took the same test and performed in the red column typically grew 4.8 scale score points per month.*

## Calculating Months of Growth

To find the **Months of Growth**, we will divide Growth by Typical Monthly Growth. For all calculated Months of Growth, round the months to the nearest integer prior to entry into CEDARS.

$$\text{Months of Growth} = \frac{\text{Growth}}{\text{Typical Monthly Growth}}$$

*In our example, Aspen Dias had a Growth of 34 and the Typical Monthly Growth for students like her was 5.6. So Aspen's Months of Growth was  $34/5.6$ , or **6 months**.*

*His sister Maria had a Growth of -20, which we recorded as 0. Typical Monthly Growth for students like Maria was 4.8. Even so, her Months of Growth is **0 months** because  $0/4.8$  is still 0.*