

# S4M Assessment Procedures

## S4M Assessment Guidelines

12/14/2022

<<Planning Notes>>

12/13/22 text copied from S4m Assessment Guidelines 6/2022

What to keep

1. Overview of workflow
2. Radius activity details
3. Checklists in subfolders for incenter use ( who is currently using the checklists?)

What to change

1. Replace with 2019 branded images
2. Add commonly used initials
3. Refer to assessment selection guide in Radius
4. Refer to workout book selection guide in Radius
5. Finalize heading and formatting after written copy is ready

<</Planning Notes>>

### **S4M Assessment Guidelines 1**

#### **Overview 4**

Assessment Quick Guide 6

Assessment Documentation: 6

Grading Assessments: 9

Record Credit: 9

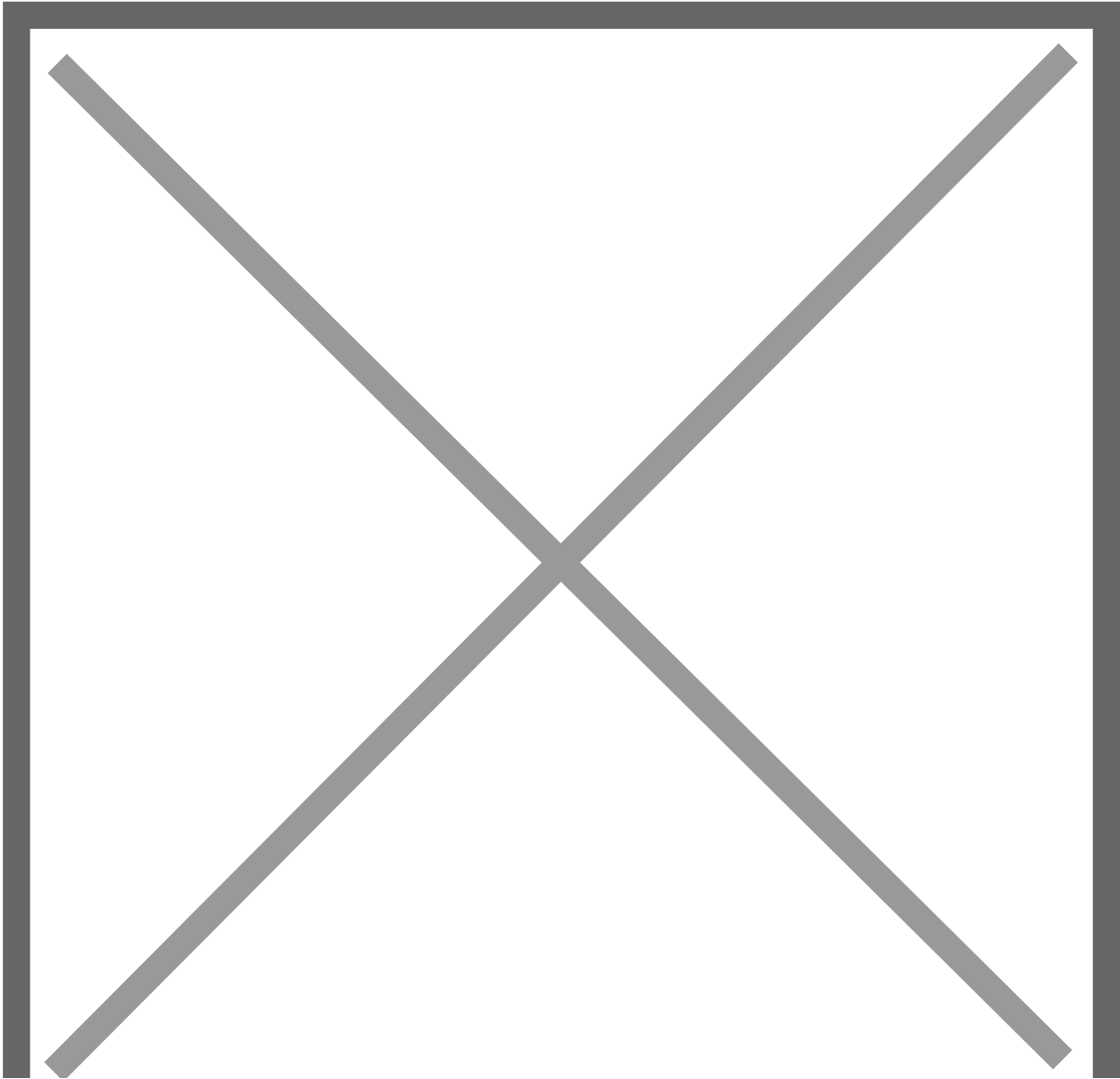
Extension Assessments: 10

Workout Book for initial assessment 12

Assessment Selection Guide 17

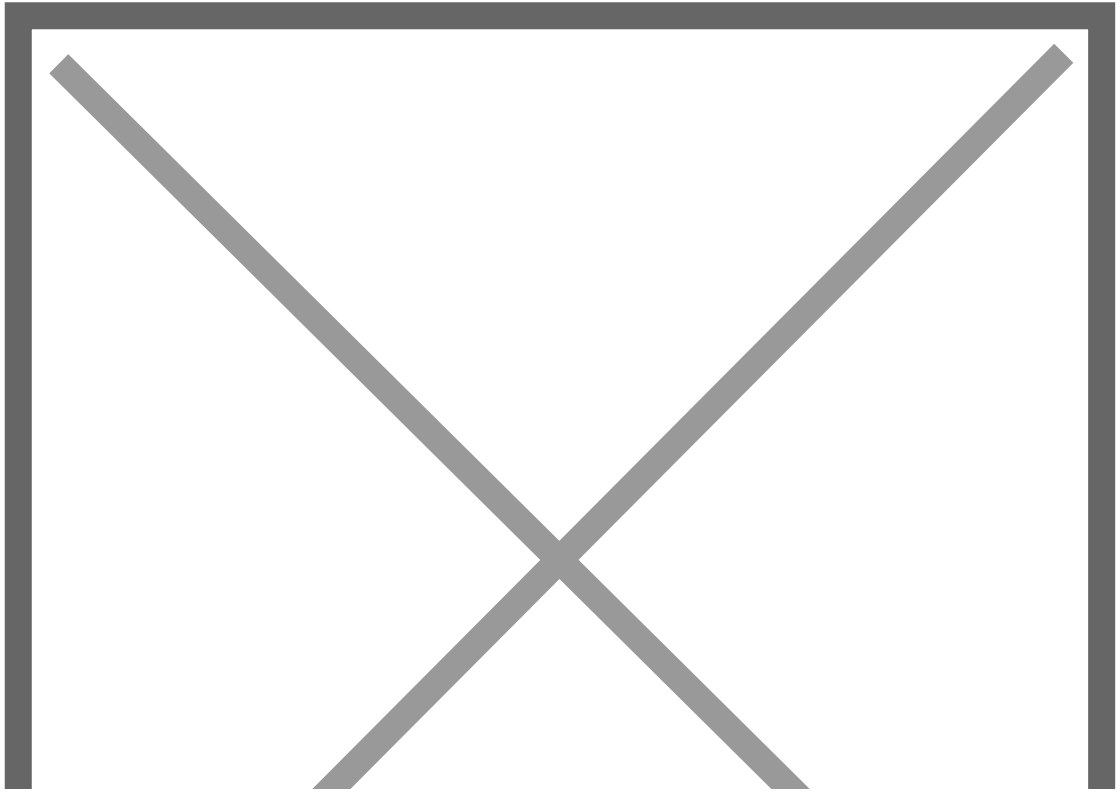
## Overview

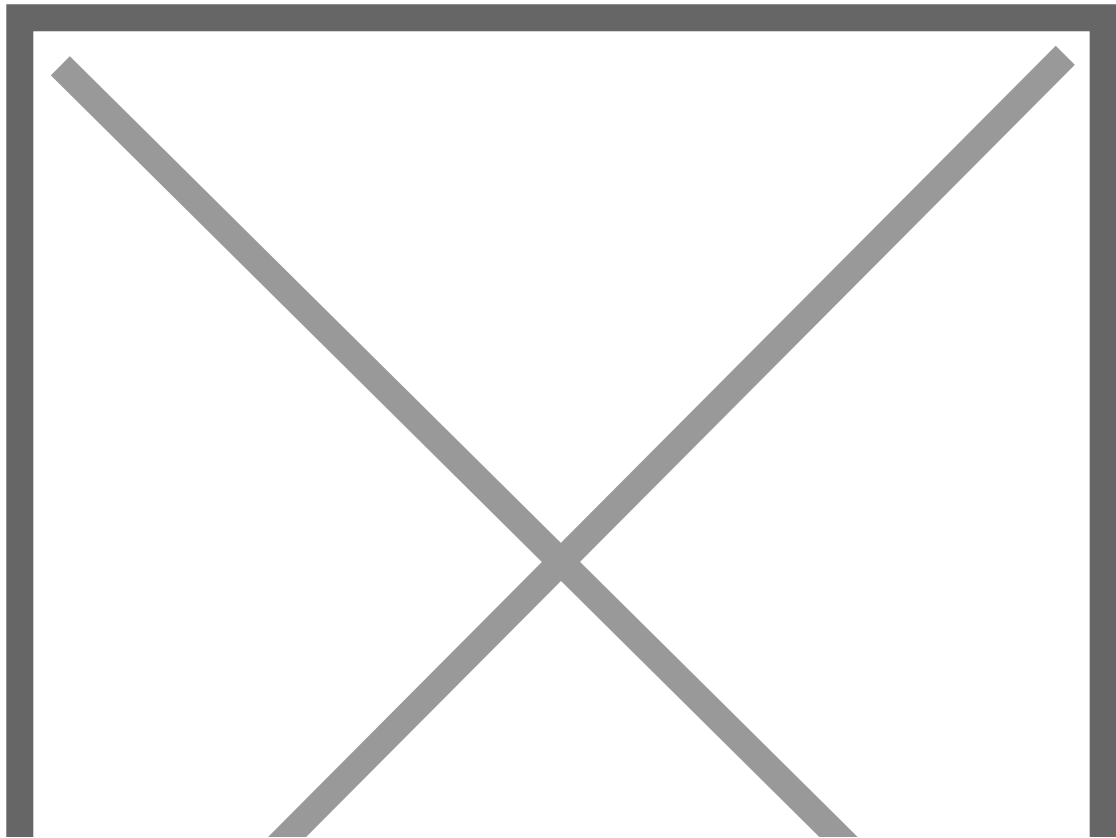
Unlike many academic subjects, math builds upon itself level by level. Many children have gaps in their math foundation that prevent them from reaching their potential. Mathnasium's proprietary curriculum ensures that students master math concepts before moving on, giving them the rock-solid foundation needed to succeed at more advanced levels.



Mathnasium builds math comprehension and skills from the ground up, balancing the short-term goal of raising school grades with the long-term goal of math mastery.

[descriptions of the right materials workflow charted below]





## Assessment Checklist

- Review student information
  - Student age grade
  - Learning history and goals
- Complete assessments
  - Complete verbal checkup
  - Coplete add-on checkup
  - Complete Mathnasium Checkup
- Review Results
  - If the core assessment is below 40%

- - If the core assessment between 40%-70%
    -
  - If the core assessment if above 70%
    -
- Create Learning Plan
  - Add WOB
  - Adjust PK order for shuffling
  - Create shuffled deck
  - Repeat for secondary deck if needed
- Communicate Results
  - Create assessment chart as resources
  - Create learning plan report as resources
  - Email results to parent with highlights
  - Complete Care Call with assessment results

## Assessment Quick Guide

The goal of every assessment is to provide the student the right materials at the right time

- Each student must have exactly 1 active learning plan
  - Source: verbal, add-on, checkup, and optional extention
  -

shuffled PKs and WOBs

- Quarterly assessment: progress check or post assessment
- Buffer pages: WOB SUPP

- Target score ranges

- Pre = 40%-70%
- Progress = +15% every 3 months
- Post ? 90%

- Optional secondary learning plan restricted to school topics

- Use 0% grade level assessments to trigger a learning plan
- Rename LP as “School Topics + grade level sources”, e.g. “School Topics - MN6/x6/CP”
- Leave as inactive and print from on demand

- Full post assessment MUST happen before a student jumps up a level. This includes NF, MFF, CP, HSFS, etc. The only exception is when a student has a projected post score ?

- 95% on a Progress Check for their core assessment (NF and MFF still need to be assessed in full).

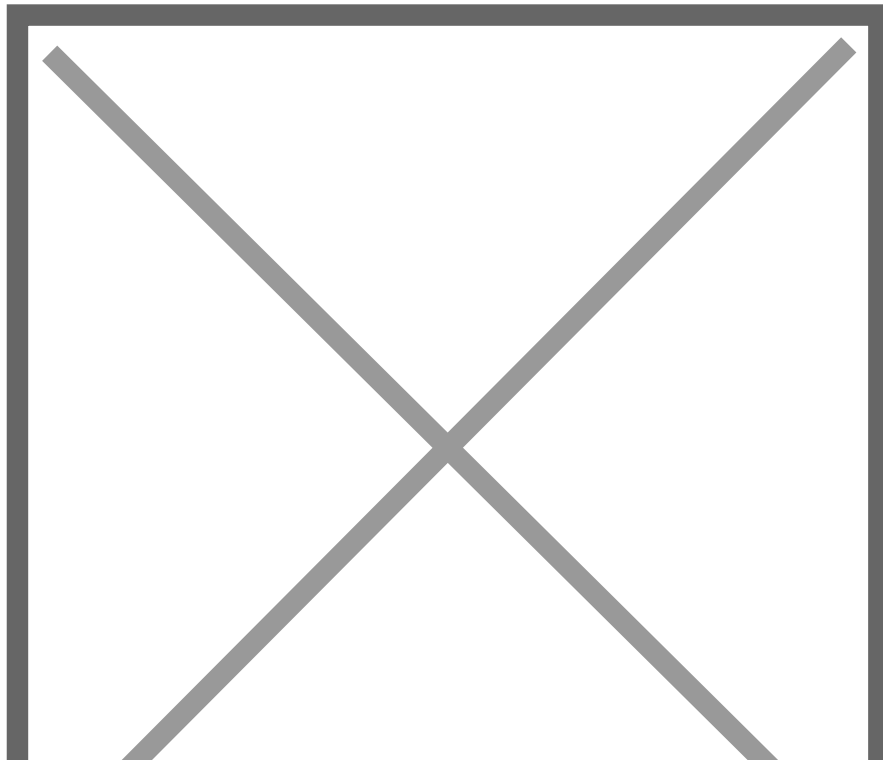
- All WOB assignments must be made through the Workout Book Assignment Guide

## Our Result

Children who consistently attend our learning centers enjoy a transformative learning experience and make tremendous strides in comprehension, confidence and grades.

Multiple independent studies conducted by Watson Education have shown that Mathnasium improves student performance on standards-based tests in 20 sessions or fewer.\*

More than a half-million parents have trusted us since Mathnasium opened its doors in 2002. But our goal isn't to be the biggest math education company — just the best.



## Assessment Documentation:

When assigning assessments, create a task with the subject “DA – MN#” with an assessment Assigned.

Include Numerical Fluency, Multiplication Fact Fluency, or Computation as appropriate. Also, indicate if it is a pre, post, or progress assessment.

## Naming Conventions:

Numerical Fluency = NF

Numerical Fluency - Addition Subtraction = NFAS

Numerical Fluency - multiplication division = NFMD

Computation = CP

High School Fundamental Skills = HSFS

Mathnasium Checkup 1-7 = MN1, MN2, MN3, MN4, MN5, MN6, MN7

Extension 1-AR = x1, x2, x3, x4, x5, x6, x7, xAR

Algebra Readiness = AR

Algebra 1A = A1A

Algebra 1B = A1B

Geometry Readiness = GR

Geometry = Geo  
Geometry with Proofs = Geo w/ Proofs  
HMM Linear = Linear  
HMM Quadratic = Quad  
HMM Advanced I = Adv 1  
HMM Advanced II = Adv 2  
HMM Trigonometry = Trig  
HMM Pre-Calc Fundamental Skills = PCFS

Examples:

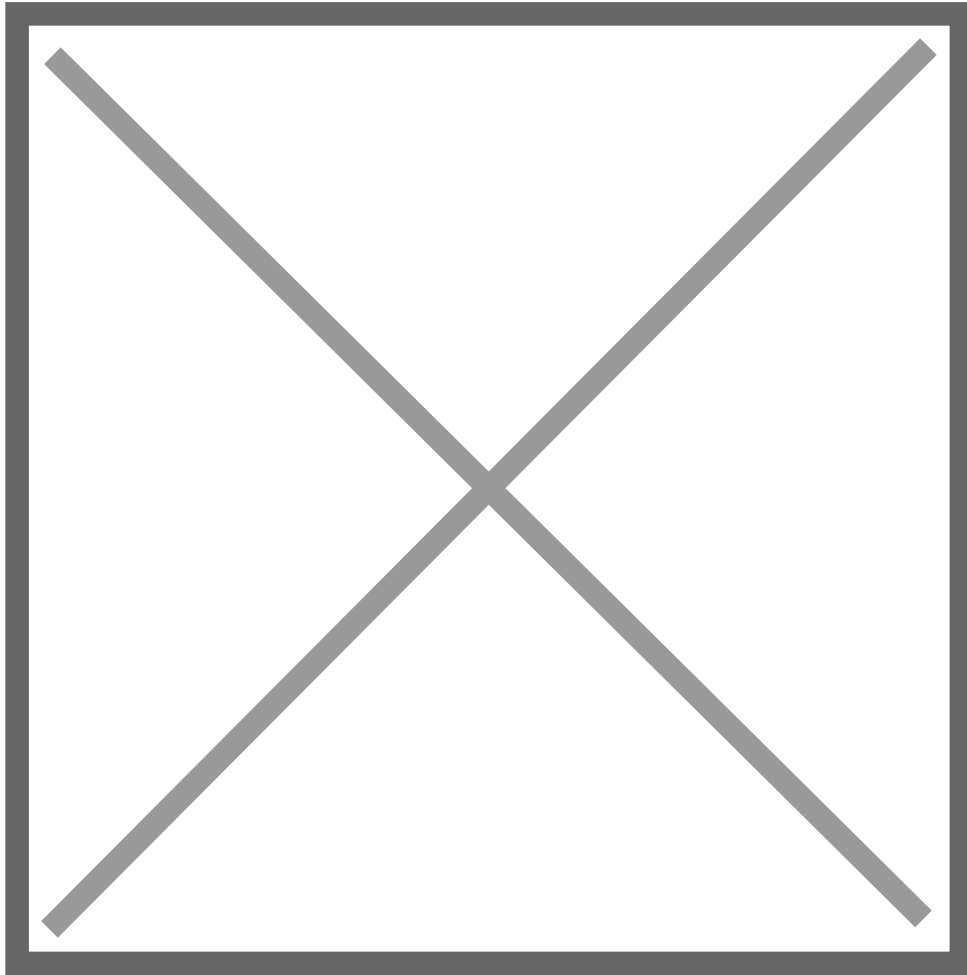
DA – MN3/MFF - Post  
DA – MN5/CP - Progress  
DA - AR/HSFS - Pre

## Radius Activity Comments

Message format should be as follows:

(Date) (Initials) Assigned MN#

(Date) (Initials) Entered MN#; grouped DA,  
updated/created LP, added WOB



### Choosing the Correct Assessment

Please follow the Assessment Selection Guide [Attached below]. Administer Numerical Fluency and/or Multiplication Fact Fluency assessments first. The add-ons (NF and MFF) are not only measure a student's computation abilities but to also help the director chose the proper assessment to administer.

? Numerical Fluency (NF) – Must accompany Mathnasium Checkups 1, 2, and 3.

? Multiplication Fact Fluency (MFF) – Must accompany Mathnasium Checkups 3 and 4.

? Computation Assessment (CP) – Must accompany Mathnasium Checkups 5, 6, and 7.

? High School

[VerbalAssessment]

0%-35%= Absolutely the wrong assessment. Need to go down a level.

35%-40% = Use caution.

40%-90% = Good to go!

? 90% = Make short LP then assess at next level upon completion of LP.

[Please follow-up with the Director of Curriculum if you have any exceptions]

Administering Assessments:

After administering NF/MFF, instruct the student to complete the easy questions on the Mathnasium Checkup. After the student has answered all the questions that they know how to do, review with them the remaining unanswered questions. Mark "H" for any questions for which you provided hints, and mark "T" for any questions that you taught the student.

Turn in all completed assessment pages

## Grading Assessments:

Numerical Fluency:

N – No knowledge (3 or more indicators) 0%

A – Awareness (2 indicators) 25%

C – Competent (1 indicator) 50%

M – Mastery (perfect score) 100%

\*Note: Indicators include S, N, or FC

Multiplication Fact Fluency:

Y – Yes (correct) 100%

S – Slow (longer than 3-5 seconds) 50%

N – No (incorrect) 0%

Mathnasium Checkup:

Place a checkmark on each correct question, circle incorrect questions, and indicate partial credit as necessary.

? 100%

H 50%

T 0%

## Record Credit:

$\frac{3}{4}$  credit can be given for a student able to self-correct once an error was pointed out, correct answer but not simplified or in the wrong place (eg. the student had the right answer in their work but posted an incorrect answer on the answer line)

$\frac{1}{2}$  credit should be given if you clarify directions, point out the correct operation (subtract and not add), or help point out an error ("check your subtraction again")

$\frac{1}{4}$  credit can be given for showing awareness of skill being assessed such as 4 by 2 division with the right steps but incorrect subtraction.

no credit should be given if you give definitions or show the student how to solve a problem.

"least common multiple is the smallest number that...", "8% means 8 for each hundred..."

Assessments should be entered in full. For students with multiple assessments, wait until all assessments are completed to make a new LP. All assessments must be grouped together and

then a new LP can be made. Students will not have more than one LP apart from one inactive School Topics LP.

## Extension Assessments:

Have been developed to extend a student's current knowledge and allow them to work on various types of application. These are intended to be used in addition to a student's Mathnasium Level Learning Plan, only once they are ready for supplemental material.

Extensions should only be added if a student scored  $\geq 70\%$  on their current grade level or higher. Anything below will not be permitted.

LEVEL 1 – Pictographs, Tally Charts, and Properties of 2-D Shapes

LEVEL 2 – Pictographs, Bar Charts, Tables, Line Plots, Frequency Tables, and Properties of 2-D Shapes

LEVEL 3 – Scaled Pictographs, Rotations, Scaled Pictographs, Introduction to Perimeter and Area, Introduction to Symmetry, Properties of Quadrilaterals, Introduction to 3-D Shapes, and Polygons

LEVEL 4 – Classifying and Measuring Angles, Parallel and Perpendicular Lines, Properties of Quadrilaterals, Symmetry, Transformations, Line Graphs, and Scaled Bar Graphs

LEVEL 5 – Classifying Angles and Triangles, Properties of 2-D and 3-D Shapes, Graphing Coordinates, Line Graphs, Introduction to Volume, Basic Symmetry, and Geometric Nets

LEVEL 6 – Perimeter and Area of Parallelograms and Composite Shapes, Problem Solving with Perimeter and Area, Surface Area and Volume of Rectangular Prisms, Classifying Triangles, Box and Whisker Plots, Basic Probability, Identifying Median and Range, Identifying Mode, Histograms, and Dot Plots

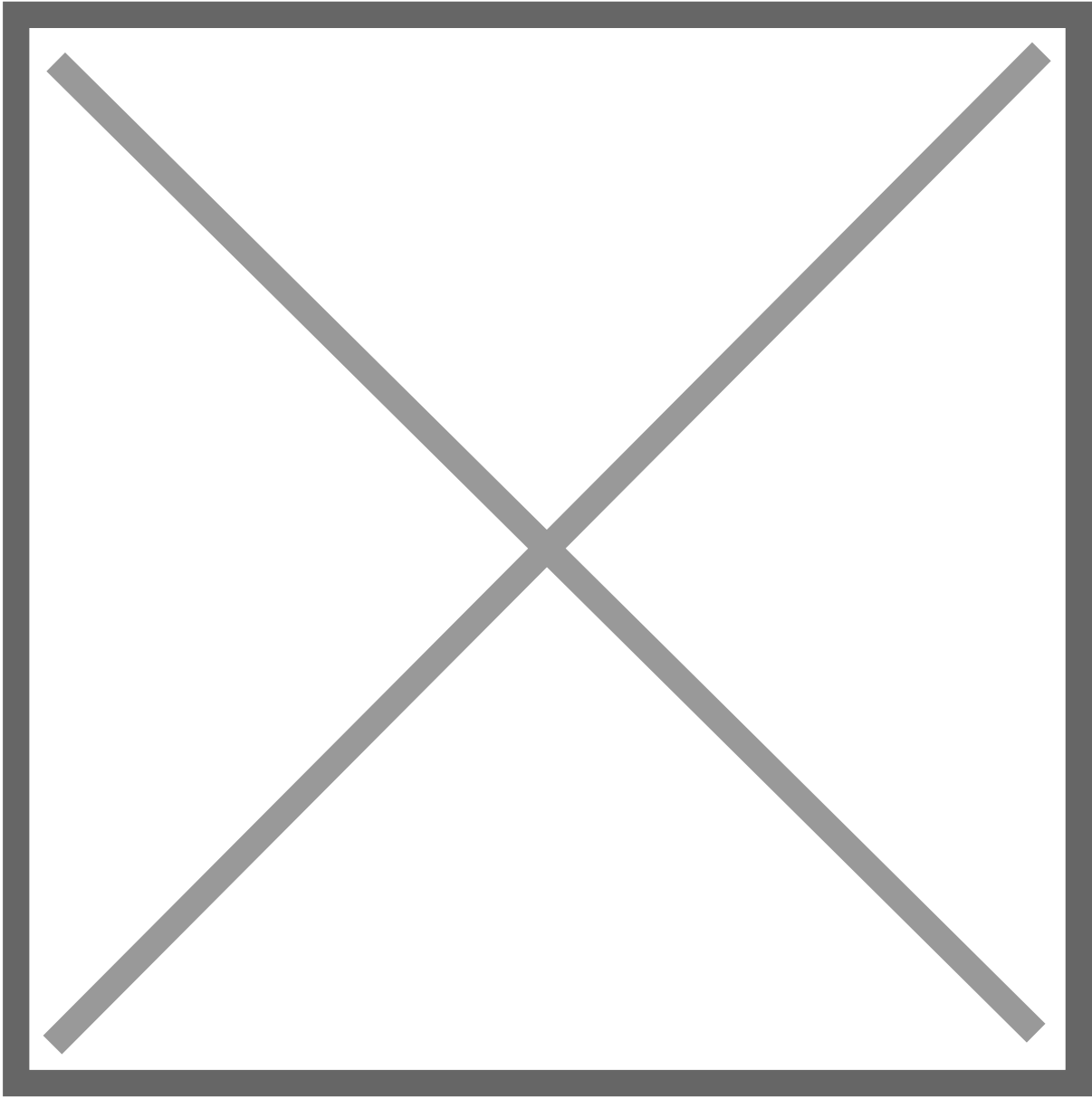
LEVEL 7 – Interior Angles, Surface Area and Volume, Circumference and Area of Circles, Probability, Scale Factors, Properties of Real Numbers, Complementary/Supplementary Angles, Vertical Angles, Linear Pairs, Pie Charts, Stem and Leaf Plots, and Central Tendency  
Algebra Readiness – The Algebra Readiness Extension Assessment was created from critical skills found on Geometry Readiness and includes a new Prescriptive on basic scatter plots.

### Progress Checks

All students are required to take a progress check at the end of a 9 PK deck or between 8-10 weeks, whichever comes first.

### Recommended Completion Times by Assessment:

Existing students may be able to complete these at faster rate. Encourage all students to circle questions they haven't seen yet.



Workout Book for initial assessment

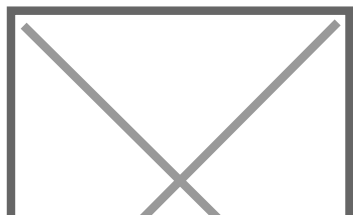
Review Radius Business Tools, business documents for current workout book selection guide

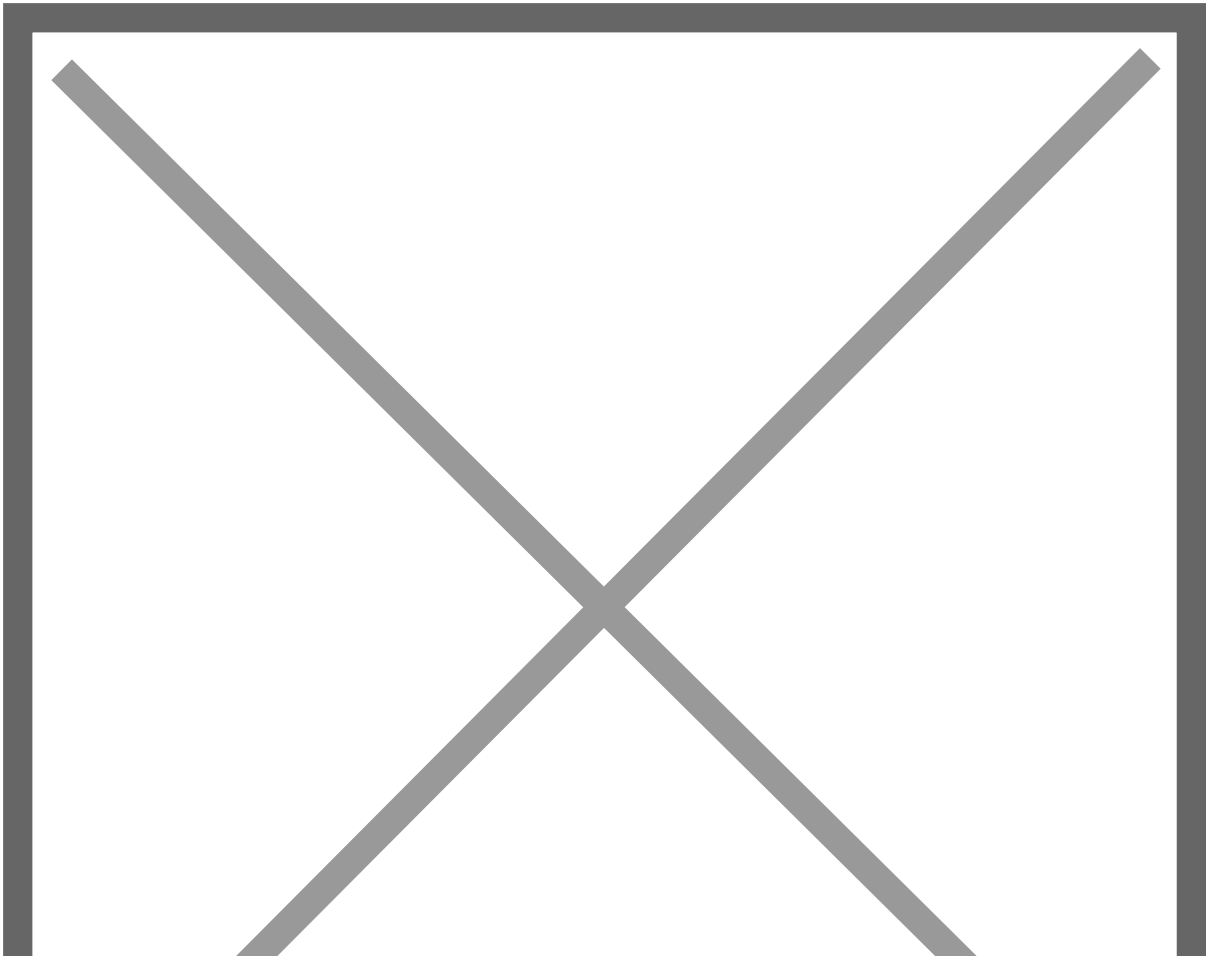
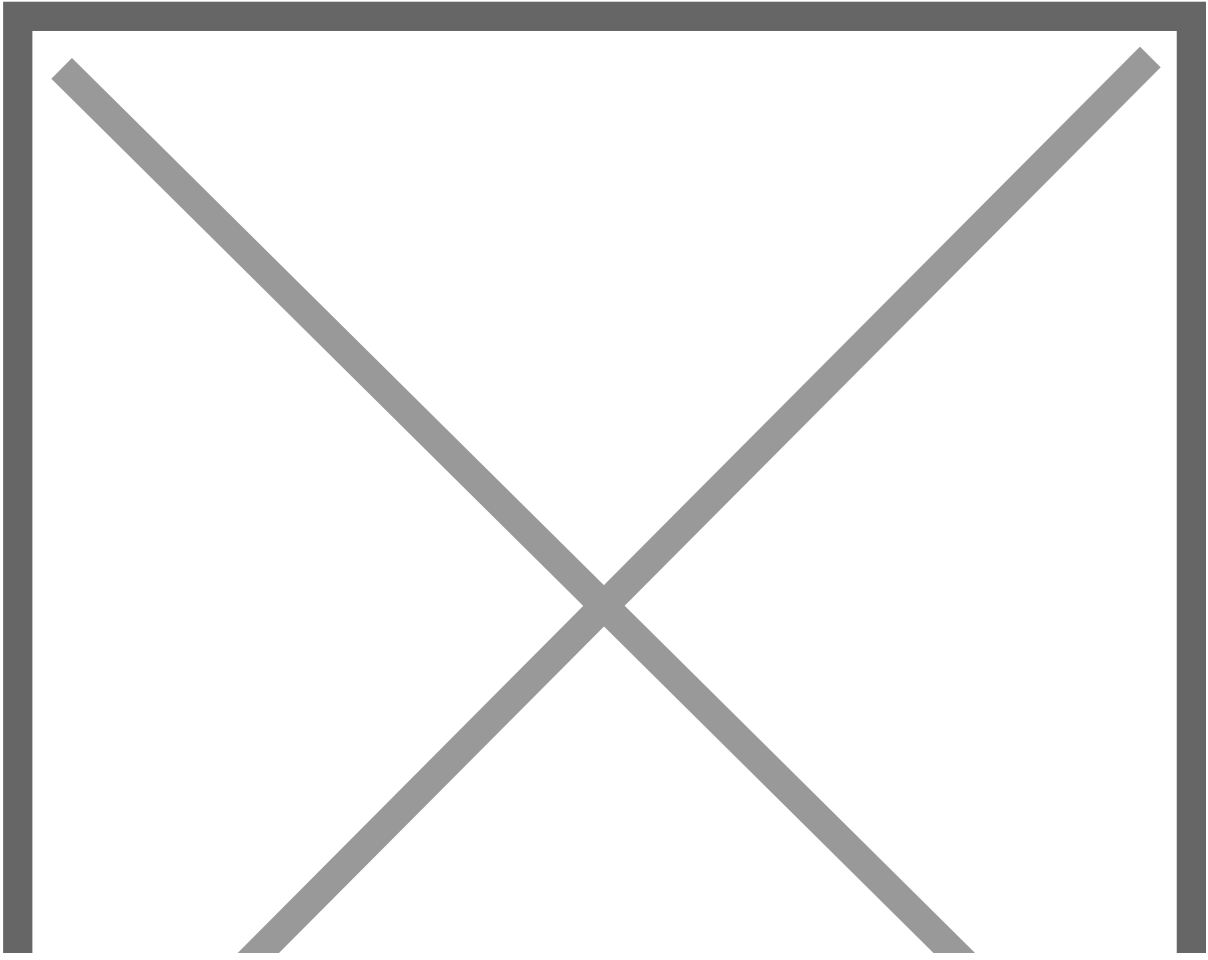
|                                      |   |  |           |
|--------------------------------------|---|--|-----------|
| Workout Book<br>Assignment Guide v17 | Workout Book<br>Assignment Guide WOB<br>– w/Page Shuffling<br>Recommendations |  | 8/26/2022 |
|--------------------------------------|---|--|-----------|

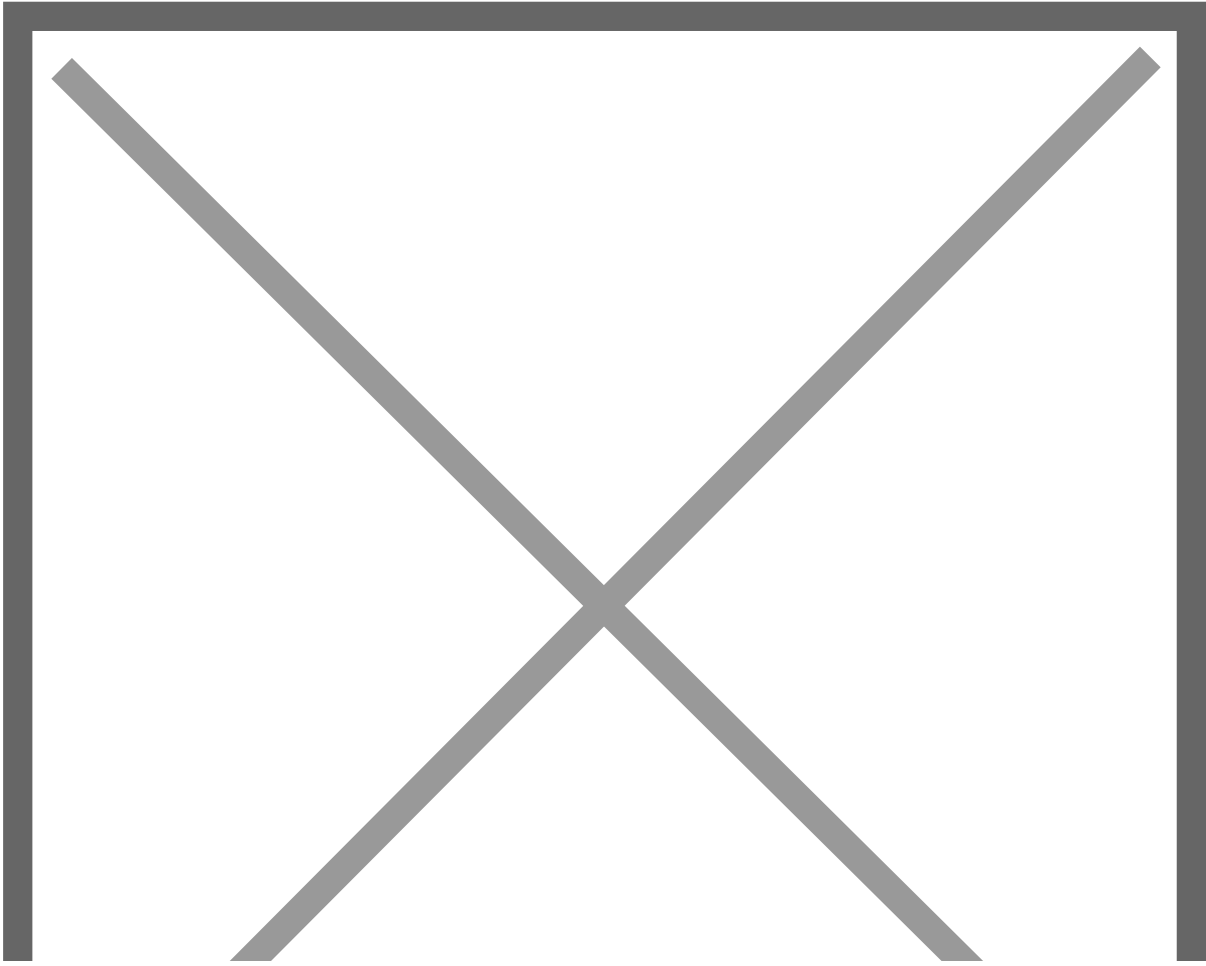
Below is an index of the Mathnasium Level Workout Books.

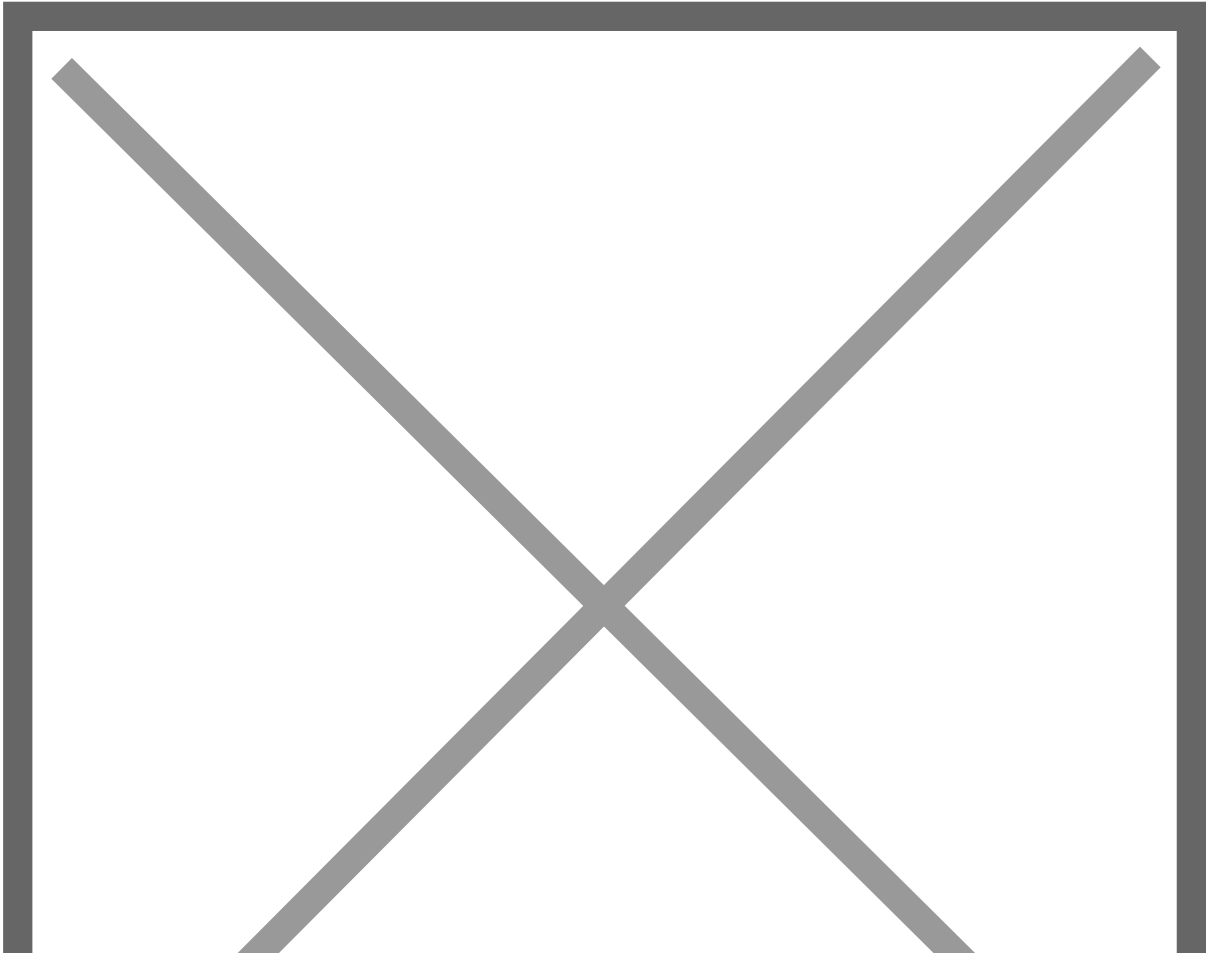


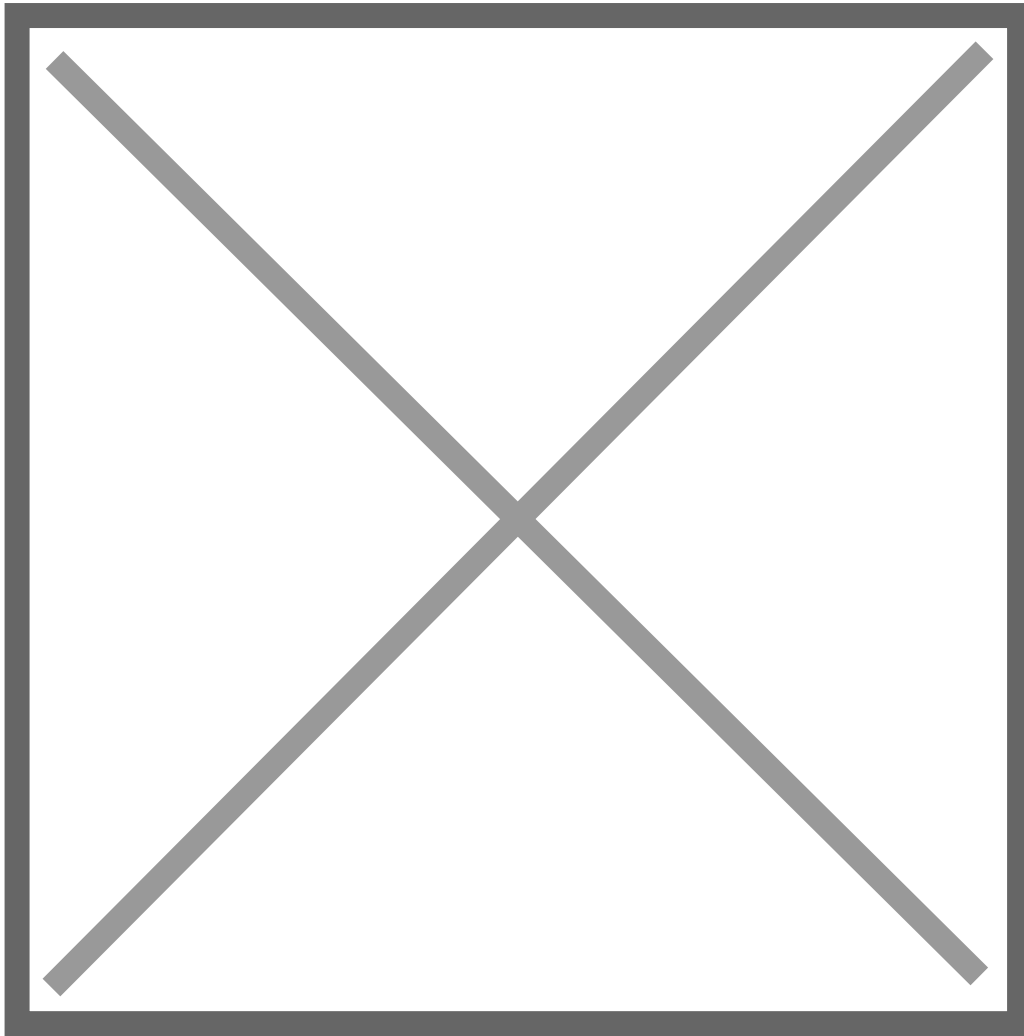
\*For students looking for practice/prep with Geometric proofs, we would advise also assigning Workout Book 6b.







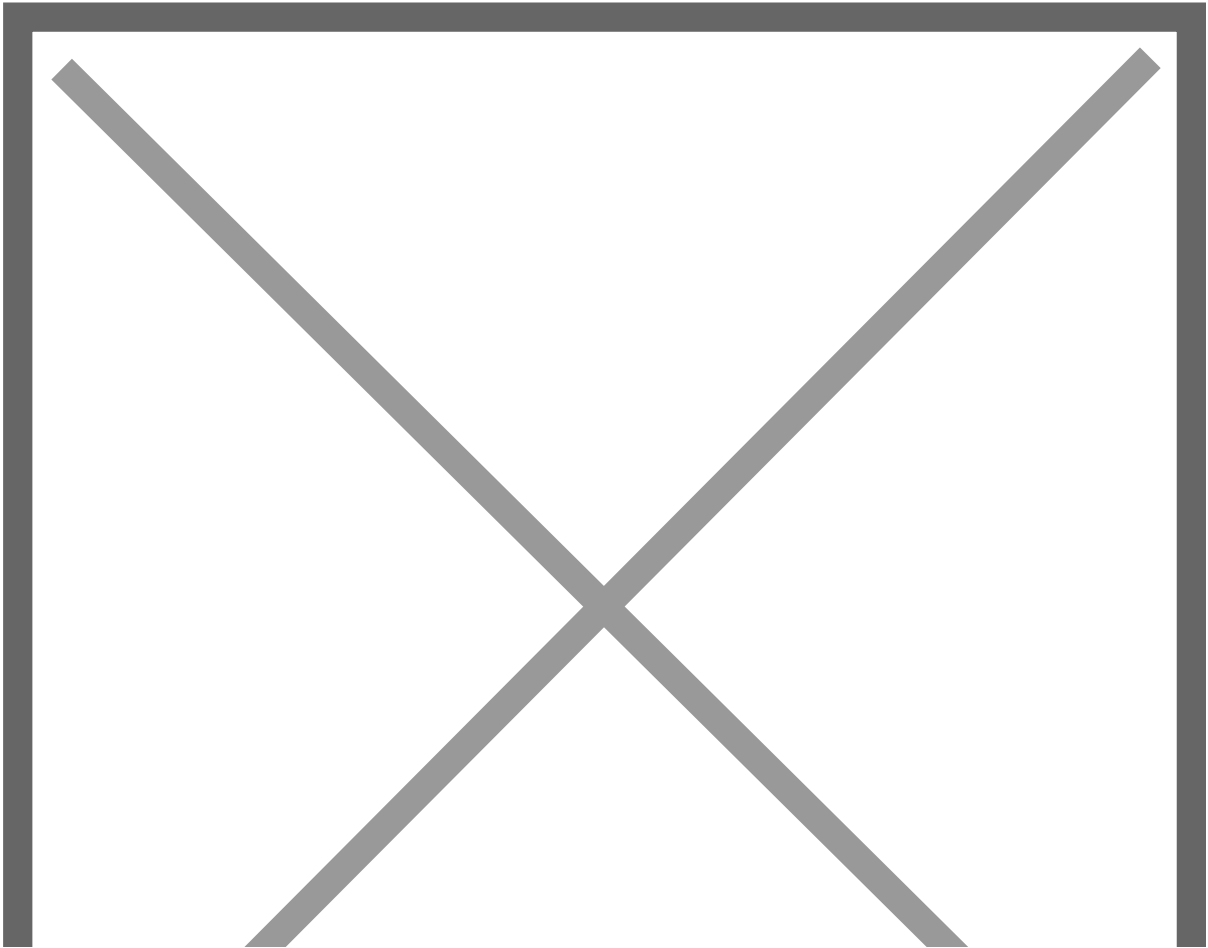


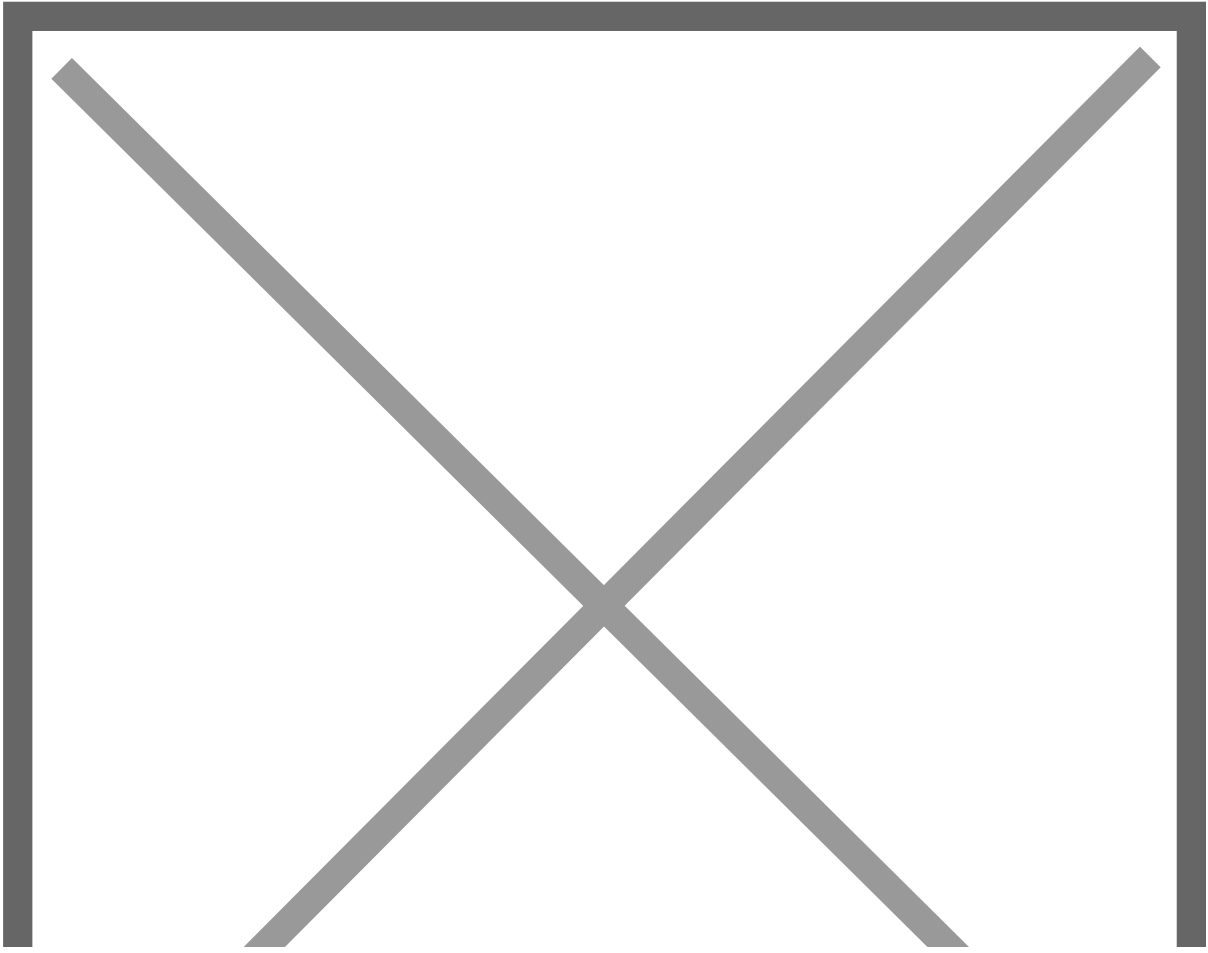


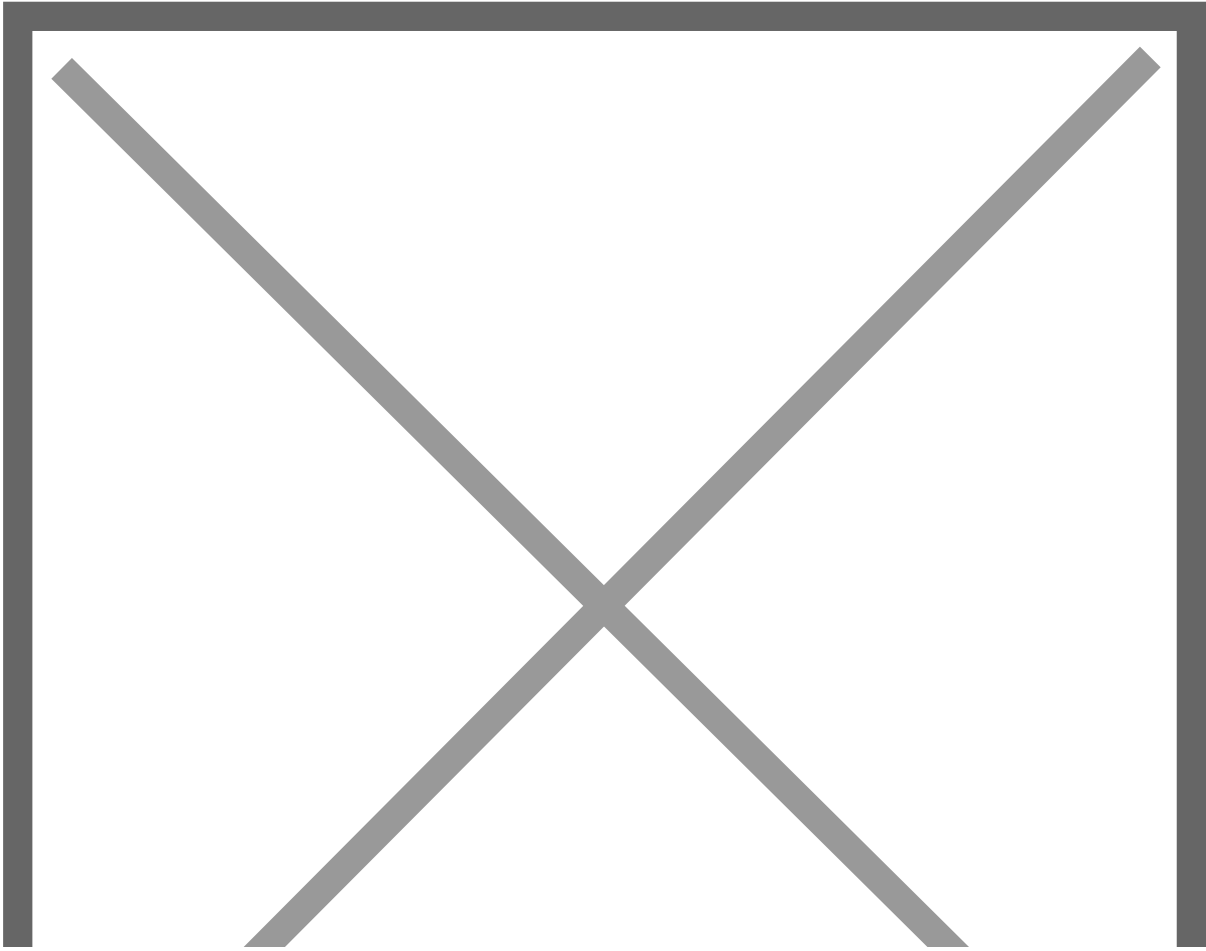
## Assessment Selection Guide

Review Radius Business Tools, business documents for current assessment selection guide

|   |   |  |           |
|---|---|--|-----------|
| Assessment Selection<br>Guide - DIGITAL | Assessment Selection<br>Guide - Digital Version to<br>be accessed via tablet or<br>computer |  | 8/26/2022 |
|---|---|--|-----------|







? add individual pages from selection guide?

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Revision #1

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