Quick Review
Sample Booklet
Grade 3
Math

Lori Mammen
Editorial Director

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Table of Contents

<table>
<thead>
<tr>
<th>What’s inside STAAR MASTER®</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick Review for Math?</td>
<td>3</td>
</tr>
<tr>
<td>Descriptions of STAAR MASTER®</td>
<td>4</td>
</tr>
<tr>
<td>Complexity Levels</td>
<td>5</td>
</tr>
<tr>
<td>Organization of Quick Review for Math</td>
<td>6</td>
</tr>
<tr>
<td>Suggestions for Using Quick Review for Math</td>
<td>7</td>
</tr>
<tr>
<td>SSI Plan</td>
<td>8</td>
</tr>
<tr>
<td>Daily SSI Lesson Plan</td>
<td>9</td>
</tr>
<tr>
<td>Daily SSI Planning Form</td>
<td>10</td>
</tr>
<tr>
<td>Master Skills List</td>
<td>11</td>
</tr>
<tr>
<td>Correlation Charts</td>
<td>14</td>
</tr>
<tr>
<td>Answer Key</td>
<td>18</td>
</tr>
</tbody>
</table>
What’s inside STAAR MASTER® Quick Review for Math?

This STAAR MASTER® Quick Review for Math includes more than 220 grade-specific practice items that reflect the content of the STAAR®-eligible TEKS for Mathematics.

The Teacher Guide includes the following information—

- an overview of STAAR MASTER Quick Review for Math and key characteristics of the State of Texas Assessments of Academic Readiness (STAAR) for Mathematics
- an explanation of Quick Review’s organization by reporting category and standard(s)
- explanations of both rigor and complexity levels as they apply to Quick Review
- an explanation of Webb’s “depth-of-knowledge” model as it relates to complexity levels used in Quick Review
- suggestions for using Quick Review in the classroom, at home, in tutorials/remedial classes/summer school, and in SSI classes
- correlation charts indicating the specific standard(s) addressed in each practice item
- a complete answer key

The STAAR MASTER Quick Review for Math, Grade 3, provides practice and review material for the mathematics portion of the STAAR. In particular, the book includes the following information—

- more than 220 practice items focusing on the grade-specific content of the STAAR-eligible TEKS for Mathematics
- practice items reflecting the kind of problems students might encounter on the actual STAAR
- a real-world context for practice items whenever possible, covering a broad range of topics and ideas of interest to students
- “skills tags” (labels) to identify the TEKS standard(s) addressed in each practice item
- multiple practice items to address each standard/expectation, providing repeated practice in a variety of contexts
- selected practice items with “gridable responses,” reflecting the format used on the actual STAAR
- mathematics reference chart

Mathematical Process Standards: The Mathematical Process Standards are not tested in isolation, nor do they appear in a separate reporting category. Rather, these standards are incorporated into practice items based on content standards from the four reporting categories. Practice items require students to demonstrate understanding of these important mathematical processes within the context of each problem.

Skills Tags: Each practice item includes a “skills tag” (Figure 1) for easy identification of the TEKS-based standard addressed in that item.

Figure 1
Descriptions of STAAR MASTER® Complexity Levels

The following descriptions provide an overview of the three complexity levels used to align the STAAR MASTER® Quick Review items to the STAAR®-eligible TEKS. Each explanation details the kinds of activities that occur within each level. However, they do not represent all of the possible thought processes for each level.

Low Complexity (L)
Low-complexity items align with the TEKS at Level 1 of the Webb (2002a) model. Items of low complexity involve recall and reproduction. Activities and problems at this level require routine, single-step methods. An item may ask students to recognize or restate a fact, definition, or term. For example, students may need to identify attributes of a geometric figure. Items of this complexity may require students to follow a basic procedure with clearly defined steps. At this cognitive level, students may need to apply a formula or perform a simple algorithm. Some major concepts represented at this level include arithmetic facts, perimeter, and converting units of measure. A low-complexity item may ask students to identify, recognize, use, or measure information and concepts.

Moderate Complexity (M)
Moderate-complexity items align with the TEKS at Level 2 of the Webb model. Items of moderate complexity involve both comprehension and the subsequent processing of information. Activities at this level demand more than one step in the reasoning process; students are asked to determine how to best solve the problem. An item may ask students to generate a table of paired numbers based on a real-life situation. Items may involve using a model to solve a problem. At this cognitive level, students will need to visualize for tasks such as extending patterns and determining nonexamples. Items may involve interpreting information from a simple graph, table, or diagram. Some major concepts represented at this level include classifying geometric figures, determining probability, and using strategies to estimate. Items of this complexity may ask students to classify, organize, observe, collect, display, or compare data. Some items also require students to apply low-complexity skills and concepts.

High Complexity (H)
High-complexity items align with the TEKS at Level 3 and/or Level 4 of the Webb model®. Items of high complexity require students to use strategic, multi-step thinking; develop a deeper understanding of the information; and extend thinking. The problems at this level are non-routine and more abstract. Students are asked to demonstrate more flexible thinking, apply prior knowledge, make and test conjectures, and support their responses. High-complexity items may require students to make generalizations from patterns. Items may involve interpreting information from a complex graph, table, or diagram. At this cognitive level, students will need to justify the reasonableness of a solution process when more than one solution exists.

Students will use concepts to solve and explain problems, such as how changes in dimensions affect the volume of a figure. A high-complexity item may ask students to plan, reason, explain, compare, differentiate, draw conclusions, cite evidence, analyze, synthesize, apply, or prove. Some items also require students to apply low- and/or moderate-complexity skills and concepts.

*Note: Although state standards may include expectations that require extended thinking, many large-scale assessment activities are not classified as Level 4. Performance and open-ended assessments may require activities at Level 4.
Organization of Quick Review for Math

The STAAR MASTER® Quick Review for Math uses a practical, user-friendly layout designed to streamline its use in a classroom, home, tutorial, or other setting.

<table>
<thead>
<tr>
<th>Reporting Category</th>
<th>Each Quick Review for Math is organized into four reporting categories. These reporting categories are dictated by the STAAR®-eligible TEKS for each grade.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week</td>
<td>Each reporting category is divided into three weeks. (However, the length of time required to complete items is best decided by the teacher.)</td>
</tr>
<tr>
<td>Day</td>
<td>Each week is then divided into five days—one “school week.” (Again, the teacher can use items at his or her own pace.)</td>
</tr>
</tbody>
</table>

The organization of reporting categories, weeks, and days is best represented by the diagram to the right, which provides an example for Reporting Category 1.

If you refer to the correlation charts on pages 14-17 of this teacher guide, you will notice “clustering” of items, depending on the week. Within each reporting category, Week 1 generally focuses on the first half of that reporting category’s standards, while Week 2 generally focuses on the second half of that reporting category’s standards. Finally, Week 3 provides a review “across the board,” offering mixed practice for the standards in that reporting category.
Answer Key

Reporting Category 1

Week 1, Day 1
1. 2. 3. 4.

Week 1, Day 2
1. 2. 3. 4.

Week 1, Day 3
1. 2. 3. 4.

Week 1, Day 4
1. 2. 3. 4.

Week 1, Day 5
1. 2. 3. 4.

Week 2, Day 1
1. 2. 3. 4.

Week 2, Day 2
1. 2. 3. 4.

Week 2, Day 3
1. 2. 3. 4.

Week 2, Day 4
1. 2. 3. 4.

Week 2, Day 5
1. 2. 3. 4.

Week 3, Day 1
1. 2. 3. 4.

Week 3, Day 2
1. 2. 3. 4.

Week 3, Day 3
1. 2. 3. 4.

Week 3, Day 4
1. 2. 3. 4.

Week 3, Day 5
1. 2. 3. 4.

Reporting Category 2

Week 1, Day 1
1. 2. 3. 4.

Week 1, Day 2
1. 2. 3. 4.

Week 1, Day 3
1. 2. 3. 4.

Week 1, Day 4
1. 2. 3. 4.

Week 1, Day 5
1. 2. 3. 4.

Week 2, Day 1
1. 2. 3. 4.

Week 2, Day 2
1. 2. 3. 4.

Week 2, Day 3
1. 2. 3. 4.

Week 2, Day 4
1. 2. 3. 4.

Week 2, Day 5
1. 2. 3. 4.

Week 3, Day 1
1. 2. 3. 4.

Week 3, Day 2
1. 2. 3. 4.

Week 3, Day 3
1. 2. 3. 4.

Week 3, Day 4
1. 2. 3. 4.

Week 3, Day 5
1. 2. 3. 4.
Table of Contents

Reporting Category 1 .......................................................... 3
Numerical Representations and Relationships

Reporting Category 2 .......................................................... 35
Computations and Algebraic Relationships

Reporting Category 3 .......................................................... 65
Geometry and Measurement

Reporting Category 4 .......................................................... 97
Data Analysis and Personal Financial Literacy

Math Reference Chart ...................................................... 128

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STAAR MASTER® Quick Review—Math, Grade 3

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3.2D (H)
3. The chart shows the number of birds that visited a feeder on 4 different days.

**Birdfeeder Visits**

<table>
<thead>
<tr>
<th>Day</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Birds</strong></td>
<td>128</td>
<td>181</td>
<td>210</td>
<td>120</td>
</tr>
</tbody>
</table>

Which statement about the birdfeeder is true?

A. More birds visited the feeder Monday than Tuesday.
B. More birds visited the feeder Monday than Thursday.
C. Fewer birds visited the feeder Tuesday than Thursday.
D. Fewer birds visited the feeder Wednesday than Thursday.

3.4I (L)
4. Marta’s mom works in an office building downtown. The building’s street number is an even number. Which could be the building where Marta’s mom works?

A. Office A
B. Office B
C. Office C
D. Office D
Math, Grade 3

REPORTING CATEGORY 1, WEEK 2

3.3D (M)

3. The figures below are partitioned into equal parts and shaded to model an equation.

\[
\begin{array}{c}
\quad \quad \quad \quad \quad \\
\quad \quad \quad \quad \quad \\
\quad \quad \quad \quad \quad \\
\end{array}
\]

Which shaded figure correctly completes the model?

A

B

C

D

3.3E (M)

4. Rory and her dad made the tacos shown below for dinner.

Rory’s dad ate 3 tacos, and Rory ate 1 taco. What fraction of the tacos did Rory and her dad eat?

A \( \frac{1}{8} \)

B \( \frac{2}{8} \)

C \( \frac{3}{8} \)

D \( \frac{4}{8} \)
REPORTING CATEGORY 2, WEEK 2

3.5C (M)

3. In July, Martin raised $35 for his scout troop’s charity fundraiser. In August, Martin raised $210 for his scout troop’s charity fundraiser. In August, Martin raised—

A 3 times as much money as he raised in July
B 4 times as much money as he raised in July
C 5 times as much money as he raised in July
D 6 times as much money as he raised in July

3.5E (M)

4. The chart below shows the total number of beads Maria uses to make different numbers of bracelets.

<table>
<thead>
<tr>
<th>Number of Bracelets</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Beads</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>32</td>
<td>40</td>
</tr>
</tbody>
</table>

How many beads would Maria use to make 8 bracelets?

Record your answer in the boxes. Then fill in the bubbles. Be sure to use the correct place value.
REPORTING CATEGORY 2, WEEK 3

3.4A (L)
1. A movie theater has 275 seats. On Monday, 168 people went to the first movie. How many seats were empty during the first movie?
   A 107
   B 113
   C 117
   D 443

3.4E (L)
2. Which picture best represents the multiplication fact below?
   \[3 \times 4 = 12\]
   A
   B
   C
   D

3.5E (M)
3. At the library, books are placed in stacks. The table below shows the number of books in different numbers of stacks.

<table>
<thead>
<tr>
<th>Number of Stacks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Books</td>
<td>4</td>
<td>8</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>

If the pattern is always the same, how many books are in three stacks?
   A 28
   B 14
   C 12
   D 10
3.7C (M)
3. The clock below shows when Greg leaves for school each morning.

Greg arrives at school 20 minutes after he leaves home. Which clock shows when he arrives at school?

A

B

C

D

3.7E (L)
4. Tricia poured 16 ounces of milk from a gallon-sized jug into a measuring cup. Which of the following shows the amount of milk she poured?

A

B

C

D
STAAR MASTER® Quick Review—Math, Grade 3

REPORTING CATEGORY 3, WEEK 2

3.7B (L)

3. Taylor’s garden is 35 feet long and 16 feet wide.

35 ft

16 ft

What is the perimeter of Taylor’s garden?

A 41 ft
B 51 ft
C 82 ft
D 102 ft

3.7E (M)

4. Grace is weighing apples at the store. The apples she is buying cost $0.99 per pound. She needs more than 1 pound of apples, but she does not want to pay more than $2.00 for them. Which of the following best shows what she needs the scale to read?

A

B

C

D

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3.8A (L)
2. An art teacher surveyed students about their favorite drawing tool. The dot plot below shows the results of the survey.

Favorite Drawing Tools

- Pen
- Pencil
- Paint
- Marker
- Chalk
- Watercolor

How many students did the art teacher survey?

A 6
B 10
C 15
D 18

3.8B (M)
3. Mrs. Miller’s students gathered information about the number of pets they each had at home. The graph below shows the information they gathered.

Pets at Home

How many more students have 3 pets than have 4 pets?

A 2
B 3
C 4
D 5
REPORTING CATEGORY 4, WEEK 2

3.9A (L)
1. Nicholas earns money by cleaning his father’s tool shed. His father pays him $2.00 for each hour he works. If he cleans the shed for 6 hours, how much total money will Nicholas earn?
   A $2.00
   B $8.00
   C $12.00
   D $16.00

3.9B (M)
2. Every month, Ms. Kellner buys laundry detergent. The chart below shows the choices offered by the store this week.

<table>
<thead>
<tr>
<th>Detergent Price</th>
<th>Sold Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>$9.99</td>
<td></td>
</tr>
<tr>
<td>$8.97 sold out</td>
<td></td>
</tr>
<tr>
<td>$10.98</td>
<td></td>
</tr>
<tr>
<td>$7.97 sold out</td>
<td></td>
</tr>
<tr>
<td>$8.68</td>
<td></td>
</tr>
</tbody>
</table>

Ms. Kellner usually buys the detergent that costs $7.97. If Ms. Kellner buys a different kind of detergent this week, how will her cost change for this month?
   A She will pay less for the detergent.
   B She will pay more for the detergent.
   C She will not be able to buy any detergent.
   D She will pay the same amount for the detergent.