Level F Placement Test

The Placement Test provides for three outcomes:

• The student lacks the necessary skills to place in CMC Level F.
• The student places at Lesson 1 of CMC Level F.
• The student places at Lesson 16 of CMC Level F.

The test has two sections: 1 and 2.

Students who have not gone through CMC Level E should take Section 1. Results of this section will determine whether each student has the necessary skills to place at Lesson 1. Students who have gone through CMC Level E should take Section 2. Results of this section will determine whether a student places at Lesson 1 or Lesson 16 of Level F.

If possible, present the Placement Test on the first day of instruction. Pass out a test to each student. Present the wording in the test Administration Directions script.

Note: What you say is shown in blue type. When observing students, make sure that they are working on the correct part of the test. Do not prompt them in a way that would let them know the answer to an item.

Reproducible copies of the test appear at the back of this guide.

CONNECTING MATH CONCEPTS—LEVEL F

PLACEMENT TEST, Section 1

Administration Directions

a. (Hand out Placement Test, Section 1 to students. Direct students to put their names on the top of the test.)

b. Everybody, find part 1. ✔
   (Teacher reference:)

<table>
<thead>
<tr>
<th>x 6</th>
<th>x 8</th>
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<th>x 9</th>
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<td>6</td>
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</table>

• For part 1, you’ll write answers to multiplication problems. I’ll time you. You’ll have 1 minute and 30 seconds to write the answers to the problems in part 1.
• Pencils ready. Go. ✔
• (At the end of 1 minute and 30 seconds, say:) Everybody, stop and put a circle around the last problem you answered. ✔

c. Find part 2. ✔
   (Teacher reference:)

<table>
<thead>
<tr>
<th>5</th>
<th>5</th>
<th>80</th>
<th>8</th>
<th>42</th>
<th>6</th>
<th>36</th>
<th>6</th>
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<tbody>
<tr>
<td>49</td>
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<td>9</td>
<td>81</td>
<td>9</td>
<td>72</td>
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<td>63</td>
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<tr>
<td>32</td>
<td>16</td>
<td>8</td>
<td>40</td>
<td>9</td>
<td>32</td>
<td>2</td>
<td>8</td>
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</tbody>
</table>

• For part 2, you’ll write answers to division problems. I’ll time you. You’ll have 1 minute and 30 seconds to write the answers to the problems in part 2.
• Pencils ready. Go. ✔
• (At the end of 1 minute and 30 seconds, say:) Everybody, stop and put a circle around the last problem you answered. ✔
d. Find part 3. ✔

(Teacher reference:)

<table>
<thead>
<tr>
<th>a.</th>
<th>b.</th>
<th>c.</th>
<th>d.</th>
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</thead>
</table>

- I’m going to say numbers. You’ll write them on the lines in part 3.
- Touch line A. ✔
- Write 1 thousand 92 on line A. ✔
- Touch line B. ✔
- Write 18 thousand 400 on line B. ✔
- Write 9 thousand 2 on line C. ✔
- Write 14 thousand 60 on line D. ✔

e. Work the problems in parts 4 and 5 on your own. Pencils down when you’re finished. ✔

(Teacher reference:)

Part 4

- a. 4 046
- b. 8 610
- c. 2 604

\[- 139\quad - 1420\quad - 793\]

Part 5

- a. 2 54
- b. 3 50
- c. 6 423

\[\times 7\quad \times 9\quad \times 5\]

- You’ll write the fraction for each description. Read each description to yourself, and write the fraction. Pencils down when you’re finished. ✔

(Observe but do not give feedback.)

c. Touch part 2. ✔

(Teacher reference:)

<table>
<thead>
<tr>
<th>a. [\frac{7}{1357}]</th>
<th>b. [\frac{5}{3155}]</th>
<th>c. [\frac{2}{804}]</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. [\frac{9}{486}]</td>
<td>e. [\frac{3}{918}]</td>
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</table>

- Work all the division problems. Pencils down when you’re finished. ✔

(Observe but do not give feedback.)

PASSING CRITERIA FOR EACH PART

<table>
<thead>
<tr>
<th>Part</th>
<th>Pass</th>
<th>Not Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1</td>
<td>0 to 3 errors</td>
<td>4 or more errors (including problems not worked)</td>
</tr>
<tr>
<td>Part 2</td>
<td>0 to 3 errors</td>
<td>4 or more errors (including problems not worked)</td>
</tr>
<tr>
<td>Part 3</td>
<td>0 or 1 error</td>
<td>2 or more errors</td>
</tr>
<tr>
<td>Part 4</td>
<td>0 or 1 error</td>
<td>2 or more errors</td>
</tr>
<tr>
<td>Part 5</td>
<td>0 or 1 error</td>
<td>2 or more errors</td>
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</tbody>
</table>

Placement Criteria

- Students who fail 3 or more parts: Administer the CMC Level E Placement Test.
- Students who pass 3 or more parts: Begin CMC Level F at Lesson 1.
d. **Touch part 3. ✔**

(Teacher reference:)

\[
\begin{align*}
\text{a. } & \frac{2}{7} \times \frac{3}{4} = \boxed{\quad} \\
\text{b. } & \frac{3}{8} \times \frac{5}{6} = \boxed{\quad}
\end{align*}
\]

- The second fraction in each problem equals 1. You’ll complete the fraction that equals 1 and then multiply. Below, you’ll write a simple equation for the fractions that are equal. Work all the problems.

Pencils down when you’re finished.

(Observe but do not give feedback.)

e. **Touch part 4. ✔**

(Teacher reference:)

\[
\begin{align*}
\text{a. } & \text{Mary is 25 years older than her daughter.} \\
\text{b. } & \text{Bill owns 110 fewer stamps than Jim.} \\
\text{c. } & \text{Jill earned $265 less than Fabio.} \\
\text{d. } & \text{The store is 12 feet taller than house.}
\end{align*}
\]

- For each sentence, you’ll make a number family with two letters and a number. Read each sentence to yourself and make the families.

Pencils down when you’re finished.

(Observe but do not give feedback.)

f. **Touch part 5. ✔**

(Teacher reference:)

\[
\begin{align*}
\text{a. } & \frac{3}{4} \times \frac{1}{8} = \boxed{\quad} \\
\text{b. } & \frac{12}{5} + \frac{2}{6} = \boxed{\quad} \\
\text{c. } & \frac{18}{4} + \frac{4}{4} = \boxed{\quad} \\
\text{d. } & \frac{8}{8} + \frac{7}{9} = \boxed{\quad} \\
\text{e. } & \frac{20}{3} - \frac{10}{9} = \boxed{\quad} \\
\text{f. } & \frac{9}{2} \times \frac{5}{2} = \boxed{\quad}
\end{align*}
\]

- If you can’t work a problem the way it is written, cross it out. Then work the rest of the problems.

Pencils down when you’re finished.

(Observe but do not give feedback.)

g. **Collect and score Placement Test, Section 2.**
CMC Level F Placement Test, Section 1
Name: _____________________________

### Part 1

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### Part 2

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<tbody>
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<td>5(\sqrt{30})</td>
<td>8(\sqrt{24})</td>
<td>7(\sqrt{42})</td>
<td>6(\sqrt{24})</td>
<td>6(\sqrt{48})</td>
<td>9(\sqrt{72})</td>
<td>6(\sqrt{54})</td>
<td>7(\sqrt{63})</td>
<td>6(\sqrt{42})</td>
</tr>
<tr>
<td>7(\sqrt{56})</td>
<td>8(\sqrt{80})</td>
<td>9(\sqrt{81})</td>
<td>9(\sqrt{45})</td>
<td>9(\sqrt{63})</td>
<td>8(\sqrt{72})</td>
<td>6(\sqrt{36})</td>
<td>3(\sqrt{24})</td>
<td>8(\sqrt{40})</td>
<td>3(\sqrt{27})</td>
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### Part 3

a. ________  b. ________  c. ________  d. ________

### Part 4

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<tbody>
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<td>a. 4 0 4 6</td>
<td>b. 8 6 1 0</td>
<td>c. 2 6 0 4</td>
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<td>- 1 4 2 0</td>
<td>- 7 9 3</td>
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### Part 5

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</tr>
</thead>
<tbody>
<tr>
<td>a. 2 5 4</td>
<td>b. 3 5 0</td>
<td>c. 6 4 2 3</td>
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</tr>
</tbody>
</table>
Part 1 Write the fraction for each description.

a. The fraction equals 4. The bottom number is 2. __
   c. There are 12 parts in each unit. Two parts are shaded. __

b. The fraction is more than 1. The numbers are 5 and 6. __
   d. The numbers are 3 and 8. The fraction is less than 1. __

Part 2 Work each problem.

a. $7 \frac{5}{757}$
   b. $5 \frac{3}{1515}$
   c. $2 \frac{8}{0404}$

   d. $9 \frac{4}{8686}$
   e. $3 \frac{9}{1818}$

Part 3 Complete the fraction that equals 1. Then multiply. Complete the simple equation below.

a. $\frac{2}{7} \times \frac{4}{4} = __$
   b. $\frac{1}{8} \times \frac{6}{6} = __$

   __ = __
   __ = __
Part 4 Make a number family with two letters and a number.

a. Mary is 25 years older than her daughter.

b. Bill owns 110 fewer stamps than Jim.

c. Jill earned $265 less than Fabio.

d. The store is 12 feet taller than house.

Part 5 Cross out the problems you cannot work the way they are written. Then work the rest of the problems.

a. \( \frac{3}{4} \times \frac{1}{8} = \) 

b. \( \frac{12}{5} + \frac{2}{2} = \) 

c. \( \frac{18}{4} + \frac{4}{4} = \) 

d. \( \frac{8}{8} + \frac{7}{9} = \) 

e. \( \frac{20}{3} - \frac{10}{3} = \) 

f. \( \frac{9}{2} \times \frac{5}{2} = \)
Part 1

1. Write the fraction for each description.
   a. The fraction equals 4. The bottom number is 2.
   b. The fraction is more than 1. The numbers are 3 and 6.
   c. There are 12 parts in each unit. Two parts are shaded.
   d. The numbers are 3 and 8. The fraction is less than 1.

Part 2

Work each problem.

Part 3

Complete the fraction that equals 1. Then multiply. Complete the simple equation below.

b. \[
\frac{2}{9} \times \frac{6}{9} \times \frac{6}{9} = \frac{2}{9} \times \frac{6}{9} \times \frac{6}{9}
\]

Part 4

Make a number family with two letters and a number.

C. Jill earned $265 less than Fabio.

Part 5

Cross out the problems you cannot work the way they are written. Then work the rest of the problems.

b. \[
\frac{2}{3} \times \frac{3}{10} = \frac{2}{3} \times \frac{3}{10}
\]