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:)

6	8	8	7	9	9	6	4	6	7
× 6	× 9	× 8	× 5	× 9	× 7	× 8	× 9	× 4	× 9
8	7	6	8	9	7	4	9	6	4
× 7	× 7	× 7	× 6	× 6	× 8	× 7	× 8	× 9	× 8

- 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:)

7)49	5)30	8)24	7)42	6)24	6)48	9)72	6)54	7)63	6)42
7)56	8)80	9)81	9)45	9)63	8)72	6)36	3)24	8)40	3)27

- 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:)

| a. _____ | b. _____ | c. _____ | d. _____ |

- 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. $\begin{array}{r} 4046 \\ -\ \ 139 \\ \hline \end{array}$ b. $\begin{array}{r} 8610 \\ -1420 \\ \hline \end{array}$ c. $\begin{array}{r} 2604 \\ -\ \ 793 \\ \hline \end{array}$

Part 5

a. $\begin{array}{r} 254 \\ \times\ \ \ 7 \\ \hline \end{array}$ b. $\begin{array}{r} 350 \\ \times\ \ \ 9 \\ \hline \end{array}$ c. $\begin{array}{r} 6423 \\ \times\ \ \ \ \ 5 \\ \hline \end{array}$

(Collect and score Placement Test, Section 1.)

─── **PASSING CRITERIA FOR EACH PART** ───

Part	Pass	Not Pass
Part 1	0 to 3 errors	4 or more errors (including problems not worked)
Part 2	0 to 3 errors	4 or more errors (including problems not worked)
Part 3	0 or 1 error	2 or more errors
Part 4	0 or 1 error	2 or more errors
Part 5	0 or 1 error	2 or more errors

─── **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*.

CONNECTING MATH CONCEPTS— LEVEL F

PLACEMENT TEST, Section 2

Administration Directions

a. (Hand out Placement Test, Section 2 to students. Direct students to put their names on the top of the test.)
- This is a test. Listen carefully and do your best work.
b. Touch part 1. ✔
    (Teacher reference:)

| 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. | ___ |

- 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:)

a. $7\overline{)357}$ b. $5\overline{)315}$ c. $2\overline{)804}$

d. $9\overline{)486}$ e. $3\overline{)918}$

- Work all the division problems. Pencils down when you're finished.
  (Observe but do not give feedback.)

d. Touch part 3. ✔
(Teacher reference:)

a. $\dfrac{2}{7} \times \dfrac{\square}{4} = \dfrac{\square}{\square}$ $\dfrac{\square}{\square} = \dfrac{\square}{\square}$ b. $\dfrac{1}{8} \times \dfrac{6}{\square} = \dfrac{\square}{\square}$ $\dfrac{\square}{\square} = \dfrac{\square}{\square}$

• 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:)

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 than house.

• 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:)

a. $\dfrac{3}{4} \times \dfrac{1}{8} = \dfrac{\square}{\square}$ b. $\dfrac{12}{5} + \dfrac{2}{2} = \dfrac{\square}{\square}$ c. $\dfrac{18}{4} + \dfrac{4}{4} = \dfrac{\square}{\square}$

d. $\dfrac{8}{8} + \dfrac{7}{9} = \dfrac{\square}{\square}$ e. $\dfrac{20}{3} - \dfrac{10}{3} = \dfrac{\square}{\square}$ f. $\dfrac{9}{2} \times \dfrac{5}{2} = \dfrac{\square}{\square}$
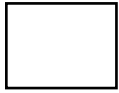
• If you can't work a problem the way it is written, cross it out. Then work the rest of the problems.
Pencils down when you're finished.
(Observe but do not give feedback.)

g. (Collect and score Placement Test, Section 2.)

SCORING THE TEST

Scoring Chart		Points
Part 1	1 for each item	4
Part 2	1 for each item	5
Part 3	1 for each equation	4
Part 4	1 for each item	4
Part 5	1 for each item crossed out or worked correctly	6
	Total	23

PLACEMENT CRITERIA

Students who score 19 points or more:	Begin *CMC Level F* at Lesson 16
Students who score 18 points or less:	Begin *CMC Level F* at Lesson 1

☐ errors

CMC Level F Placement Test, Section 1   Name: _____

Part 1

6	8	8	7	9	9	6	4	6	7
× 6	× 9	× 8	× 5	× 9	× 7	× 8	× 9	× 4	× 9

8	7	6	8	9	7	4	9	6	4
× 7	× 7	× 7	× 6	× 6	× 8	× 7	× 8	× 9	× 8

Part 2

7$\overline{)49}$ 5$\overline{)30}$ 8$\overline{)24}$ 7$\overline{)42}$ 6$\overline{)24}$ 6$\overline{)48}$ 9$\overline{)72}$ 6$\overline{)54}$ 7$\overline{)63}$ 6$\overline{)42}$

7$\overline{)56}$ 8$\overline{)80}$ 9$\overline{)81}$ 9$\overline{)45}$ 9$\overline{)63}$ 8$\overline{)72}$ 6$\overline{)36}$ 3$\overline{)24}$ 8$\overline{)40}$ 3$\overline{)27}$

Part 3

a. _____   b. _____   c. _____   d. _____

Part 4

a. 4 0 4 6   b. 8 6 1 0   c. 2 6 0 4
  –   1 3 9   – 1 4 2 0   –   7 9 3

Part 5

a. 2 5 4   b. 3 5 0   c. 6 4 2 3
  ×   7   ×   9   ×   5

☐ errors

CMC Level F Placement Test, Section 2   Name: _____

Part 1 Write the fraction for each description.

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

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

Part 2 Work each problem.

a. $7\overline{)357}$ **b.** $5\overline{)315}$ **c.** $2\overline{)804}$

d. $9\overline{)486}$ **e.** $3\overline{)918}$

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

a. $\dfrac{2}{7} \times \dfrac{}{4} = \dfrac{}{}$ **b.** $\dfrac{1}{8} \times \dfrac{6}{} = \dfrac{}{}$

$\dfrac{}{} = \dfrac{}{}$ $\dfrac{}{} = \dfrac{}{}$

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 than house.

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

a. $\dfrac{3}{4} \times \dfrac{1}{8} = \underline{}$

b. $\dfrac{12}{5} + \dfrac{2}{2} = \underline{}$

c. $\dfrac{18}{4} + \dfrac{4}{4} = \underline{}$

d. $\dfrac{8}{8} + \dfrac{7}{9} = \underline{}$

e. $\dfrac{20}{3} - \dfrac{10}{3} = \underline{}$

f. $\dfrac{9}{2} \times \dfrac{5}{2} = \underline{}$

CMC Level F Placement Test Answer Key, Section 1

(varies) errors

CMC Level F Placement Test, Section 1   Name: _____

Part 1

6	8	8	7	9	9	6	4	6	7
× 6	× 9	× 8	× 5	× 9	× 7	× 8	× 9	× 4	× 9
36	72	64	35	81	63	48	36	24	63

8	7	6	8	9	7	4	9	6	4
× 7	× 7	× 7	× 6	× 6	× 8	× 7	× 8	× 9	× 8
56	49	42	48	54	56	28	72	54	32

Part 2

7	6	3	6	4	8	8	9	9	7
7⟌49	5⟌30	8⟌24	7⟌42	6⟌24	6⟌48	9⟌72	6⟌54	7⟌63	6⟌42

8	10	9	5	7	9	6	8	5	9
7⟌56	8⟌80	9⟌81	9⟌45	9⟌63	8⟌72	6⟌36	3⟌24	8⟌40	3⟌27

Part 3

a. __1092__   b. __18,400__   c. __9002__   d. __14,060__
[no comma is ok]   [no comma is ok]

Part 4

a. 4 0 4 6   b. 8 6 1 0   c. 2 6 0 4
   − 1 3 9   − 1 4 2 0   − 7 9 3
   3 9 0 7   7 1 9 0   1 8 1 1

Part 5

a. 2 5 4   b. 3 5 0   c. 6 4 2 3
   ×   7   ×   9   ×   5
   1 7 7 8   3 1 5 0   3 2,1 1 5

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CMC Level F Placement Test Answer Key, Section 2

(varies) errors

CMC Level F Placement Test, Section 2   Name: _____

Part 1
Write the fraction for each description.

a. The fraction equals 4. $\frac{8}{2}$
   The bottom number is 2.

c. There are 12 parts in each unit. $\frac{2}{12}$
   Two parts are shaded.

b. The fraction is more than 1. $\frac{6}{5}$
   The numbers are 5 and 6.

d. The numbers are 3 and 8. $\frac{3}{8}$
   The fraction is less than 1.

Part 2
Work each problem.

a. 51
   7⟌357

b. 63
   5⟌315

c. 402
   2⟌804

d. 54
   9⟌486

e. 306
   3⟌918

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

a. $\frac{2}{7} \times \frac{4}{4} = \frac{8}{28}$

b. $\frac{1}{8} \times \frac{6}{6} = \frac{6}{48}$

$\frac{2}{7} = \frac{8}{28}$

$\frac{1}{8} = \frac{6}{48}$

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[ ] errors

CMC Level F Placement Test, Section 2   Name: _____

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

a. Mary is 25 years older than her daughter.   25 → d → M

b. Bill owns 110 fewer stamps than Jim.   110 → B → J

c. Jill earned $265 less than Fabio.   265 → J → F

d. The store is 12 feet taller than than house.   12 → h → S

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

a. $\frac{3}{4} \times \frac{1}{8} = \frac{3}{32}$

b. $\frac{12}{5} \times \frac{2}{2} = —$

c. $\frac{18}{4} + \frac{4}{4} = \frac{22}{4}$

d. $\frac{8}{8} \times \frac{7}{9} = —$

e. $\frac{20}{3} - \frac{10}{3} = \frac{10}{3}$

f. $\frac{9}{2} \times \frac{5}{2} = \frac{45}{4}$

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