



Functional Independence Mathematics

Official Released Items

Grade 8

**Fall 2009
Official Released Items**

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The Grade 8 Functional Independence Mathematics Assessment was administered for the first time in Fall 2005. Beginning with this administration, the Office of Educational Assessment and Accountability (OEAA) will annually release a portion of the items that are administered on the assessment. This booklet contains released items from the Fall 2009 administration and is intended to be used by districts to assist in their interpretation of item analysis data. The information contained in this booklet may also be used by schools, teachers, and parents as a resource for understanding the content and format of the assessment items. In addition to MI-Access training materials and Extended Grade Level Content Expectations (EGLCE), the released items may also have utility in informing decisions related to instruction, curriculum, and assessment. These items are **not** secure and may be copied and distributed as needed.

The table below lists the number of core and released items administered on the Fall 2009 Grade 8 assessment booklet. Core items are those that count toward students' scores. All released items in this booklet were selected from the pool of core items that appeared on the assessment.

Functional Independence Mathematics Grade 8

Mathematics Strand	Number of Core Items
Numbers and Operations	17
Algebra	2
Measurement	10
Geometry	3
Data and Probability	3
Total Core Items/Points	35
Released Items	10 (Numbers vary by strand and topic.)

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DIRECTIONS: Read each question. Choose the **BEST** answer for each question.

R1 What is the rule for the pattern below?

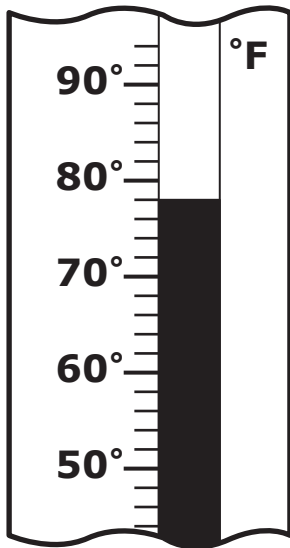
4, 8, 12, 16, _____

A add 2

B add 1

C add 4

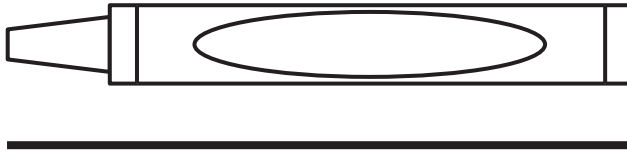
Use the thermometer below to answer question **R2**.



R2 Which temperature is shown?

- A** 74°F
- B** 76°F
- C** 78°F

Use the picture below and ruler to answer question **R3**.



R3 How long is the crayon to the **nearest** quarter-inch?

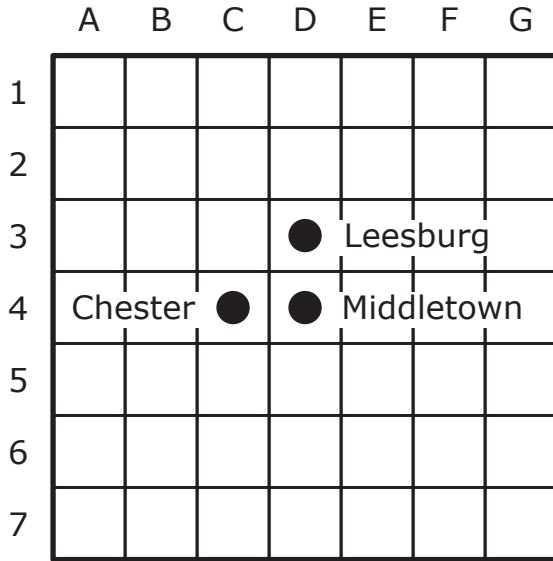
A 3 inches

B $3\frac{1}{4}$ inches

C 4 inches

Use the map below to answer question **R4**.

Map of Clark County



R4 Which city is located in D-3?

- A** Middletown
- B** Leesburg
- C** Chester

R5 What is 6×17 ?

A 23

B 52

C 102

Use the coins below to answer question **R6**.



R6 How much money is shown?

- A** 27¢
- B** 37¢
- C** 47¢

R7 Which set of fractions is listed in order from **least** to **greatest**?

A $\frac{1}{8}$, $\frac{5}{8}$, $\frac{2}{8}$, $\frac{7}{8}$

B $\frac{2}{8}$, $\frac{7}{8}$, $\frac{1}{8}$, $\frac{5}{8}$

C $\frac{1}{8}$, $\frac{2}{8}$, $\frac{5}{8}$, $\frac{7}{8}$

R8 Matt is shipping 11 toys to a store.

He can fit 3 toys in each box.

About how many boxes does he need to ship all 11 toys?

A 2

B 3

C 4

R9 Juan cut a rope that is 100 feet long into 4 equal pieces.

What is the length of each piece?

A 40 feet

B 30 feet

C 25 feet

R10 A horse trots 8 miles per hour.

How far will it trot in 3 hours?

- A** 11 miles
- B** 16 miles
- C** 24 miles



Do Not Continue.

Below is a list of the Extended Grade Level Content Expectations (EGLCE) for each released item found in this booklet. The chart contains the EGLCE code, a brief description of what is measured, and the correct answer for each released item.

Because the assessment was administered during the **fall** of the school year, only content from the *previous* grade level was measured on the assessment. For example, items eligible for the Grade 8 assessment will measure the Grade 7 EGLCE.

Full descriptions of the EGLCE contained in the chart below are available for review and download at **www.mi.gov/mi-access**.

Released Item Number	EGLCE Code	STRAND or Abbreviated Extended GLCE Descriptor	Answer Key
		ALGEBRA	
R10	A.FO.07.FI.EG01	Solve applied problems involving rates	C
		GEOMETRY	
R4	G.LO.07.FI.EG02	Name locations using simple coordinate systems	B
		MEASUREMENT	
R2	M.UN.07.FI.EG01	Use standard tools for measurement	C
R3	M.UN.07.FI.EG04	Measure lengths to the nearest quarter-inch	B
R6	M.PS.07.FI.EG14	Tell the amount of money in dollars and cents	A
		NUMBERS AND OPERATIONS	
R1	N.MR.07.FI.EG07	Find the next number in a simple repeating pattern	C
R5	N.FL.07.FI.EG13	Calculate simple products	C
R7	N.MR.07.FI.EG18	Compare and order fractions	C
R8	N.FL.07.FI.EG23	Apply estimation in solving problems	C
R9	N.MR.07.FI.EG25	Solve applied problems	C



Michigan Department of Education
Office of Educational Assessment and Accountability
608 West Allegan Street
P.O. Box 30008
Lansing, MI 48909
(877) 560-8378
www.mi.gov/mi-access