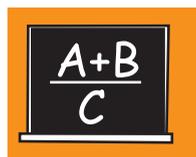


# Functional Independence

Fall 2013



## Mathematics

### *Item Descriptors*

# Grade 7

**MICHIGAN STATE BOARD OF EDUCATION  
STATEMENT OF ASSURANCE OF COMPLIANCE WITH FEDERAL LAW**

The Michigan State Board of Education complies with all Federal laws and regulations prohibiting discrimination and with all requirements and regulations of the U.S. Department of Education. It is the policy of the Michigan State Board of Education that no person on the basis of race, color, religion, national origin or ancestry, age, sex, marital status, or handicap shall be discriminated against, excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in any program or activity for which it is responsible or for which it receives financial assistance from the U.S. Department of Education.

Copyright © 2013, held by the State Administrative Board, State of Michigan. All rights reserved. Printed in U.S.A.

**Permission is granted to schools, parents, government agencies and non-profit organizations in Michigan to reproduce and distribute this document for non-commercial use in helping Michigan educators and other citizens in interpreting and using the MI-Access assessment results.**

For all instances other than identified in the previous paragraph, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission from the Bureau of Assessment and Accountability.

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

**NOTE: For each item listed throughout this booklet, the first statement is a summary of the Michigan Extended Grade Level Content Expectation (EGLCE) and the second statement or problem is the descriptor for the item's stem or question.**

- 1 N.MR.06.FI.EG05:** Create, describe, and extend simple number patterns

Find next number in decreasing skip-counting pattern

- A** correct
- B** amount of decrease
- C** last number given in pattern

- 2 N.MR.06.FI.EG06:** Find the next number in a simple repeating pattern

Describe amount skip-counting pattern is increasing

- A** 20 less than correct amount
- B** correct
- C** 20 more than correct amount

- 3 M.UN.06.FI.EG02:** Select appropriate units of measure

Identify unit for weight

- A** unit of length
- B** unit of volume (capacity)
- C** correct

- 4 M.UN.06.FI.EG08:** Know equivalent calendar units

Translate years into months

- A** 1 year = 6 months
- B** correct
- C** 1 year = 15 months

**5 M.UN.06.FI.EG08:** Know equivalent calendar units

Know number of days in a week

- A** not enough days
- B** not enough days
- C** correct

**6 M.UN.06.FI.EG07:** Tell time on a radial or digital clock to the nearest hour

Tell time on radial clock

- A** location of minute hand
- B** 2 hours earlier
- C** correct

**7 M.PS.06.FI.EG09:** Solve one-step word problems

Given radial clock, tell time it will be after elapsed time

- A** correct
- B** number of elapsed hours
- C** time on clock displayed

**8 G.LO.06.FI.EG01:** Describe and use relative position of objects on a plane and in space

Determine where an object in picture is placed relative to other object

- A** correct
- B** object placed in opposite position
- C** object with incorrect position

**9 M.UN.06.FI.EG04:** Measure lengths to the nearest half-inch

Measure length to the nearest half-inch

- A** half-inch less than correct length
- B** correct
- C** one inch more than correct length

- 10 G.LO.06.FI.EG03:** Read, interpret, and use maps and grids with legends

Identify correct set of directions given map

- A** incorrect directions
- B** correct
- C** incorrect directions

- 11 M.UN.06.FI.EG04:** Measure lengths to the nearest half-inch

Use ruler to measure length of rectangle

- A** incorrect length
- B** incorrect length
- C** correct

- 12 N.ME.06.FI.EG01:** Read, write, and count using whole numbers to 10,000

Translate word form of number into standard form

- A** correct
- B** ones = hundreds
- C** ones = tens

- 13 N.ME.06.FI.EG02:** Recognize equivalent representations for whole numbers to 10,000

Determine value shown with number blocks

- A** hundreds block = 10
- B** correct
- C** ones block = 10

- 14 N.ME.06.FI.EG03:** Express numbers to 10,000 using place value

Identify numeral with given place value

- A** over by factor of 100
- B** over by factor of 10
- C** correct

- 15 N.ME.06.FI.EG03:** Express numbers to 10,000 using place value

Determine numeral with given place value

- A** over by factor of 10
- B** correct
- C** under by factor of 100

- 16 N.ME.06.FI.EG04:** Compare and order numbers to 10,000

Identify number greater than given number

- A less than given number
- B correct
- C less than given number

- 17 D.RE.06.FI.EG03:** Describe the shape of data using informal language

Describe data given in chart

- A incorrect trend
- B correct
- C incorrect trend

- 18 D.RE.06.FI.EG01:** Read data from charts, tables, graphs, tallies, and pictographs

Match given bar graph to table

- A incorrect table
- B incorrect table
- C correct

- 19 M.UN.06.FI.EG01:** Select and use standard tools for measurement

Identify tool used to measure length

- A correct
- B tool used to measure temperature
- C tool used to measure volume

- 20 N.MR.06.FI.EG13:** Represent multiplication and division using objects, words, and symbols

Divide in context of equal sharing

- A less than correct quotient
- B correct
- C greater than correct quotient

- 21 D.RE.06.FI.EG04:** Solve problems using data in tables, graphs, tallies, and pictographs

Calculate total from chart

- A difference
- B 10 less than total
- C correct

**22 N.FL.06.FI.EG07:** Add and subtract one- and two-digit numbers

Subtract word form of two 2-digit numbers

- A** under by 8
- B** correct
- C** subtracted smaller values from larger values

**23 G.LO.06.FI.EG02:** Find and name locations using simple coordinate systems

Interpret map to find house

- A** street that is parallel to and just south of correct street
- B** correct
- C** street that is perpendicular to correct street

**24 N.MR.06.FI.EG08:** Solve simple number sentences for addition and subtraction

Add two 2-digit numbers

- A** 10 less than sum
- B** subtracted in ones place
- C** correct

**25 N.FL.06.FI.EG07:** Add and subtract one- and two-digit numbers

Subtract two 2-digit numbers

- A** correct
- B** subtracted smaller values from larger values
- C** 10 more than difference

**26 N.FL.06.FI.EG14:** Apply estimation in solving problems

Estimate subtraction in context

- A** 10 fewer than correct estimate
- B** correct
- C** 10 more than correct estimate

**27 N.MR.06.FI.EG16:** Solve applied problems

Add in context

- A** mean
- B** 2nd addend
- C** correct

**28 N.MR.06.FI.EG15:** Select appropriate numbers to solve problems

Select correct addition expression

- A** incorrect addend
- B** incorrect addend
- C** correct

**29 N.MR.06.FI.EG09:** Understand multiplication

Translate multiplication sentence into addition expression

- A**  $a \times b = a + b$
- B** correct
- C**  $a \times b = b \times b$

**30 N.MR.06.FI.EG12:** Understand the relationship between multiplication and division

Identify related division equations

- A** incorrect division sentence
- B** incorrect division sentence
- C** correct

**31 M.PS.06.FI.EG12:** Add and subtract money in dollars and cents

Add money in dollars and cents

- A** subtracted cents
- B** incorrect addition with cents
- C** correct

**32 N.FL.06.FI.EG14:** Apply estimation in solving problems

Estimate multiplication in context

- A** estimate of first factor
- B** used incorrect 2nd factor
- C** correct

**33 M.UN.06.FI.EG10:** Recognize equivalent sets of coins and bills

Identify set of bills with same value as given bill

- A** correct
- B** set of bills with less value
- C** set of bills with less value

- 34 M.PS.06.FI.EG11:** Tell the amount of money in dollars and cents

Determine decimal value of given bills and coins

- A** quarter = 5 cents
- B** correct
- C** 5-dollar bill = \$50,  
10-dollar bill = \$1

- 35 M.PS.06.FI.EG12:** Add and subtract money in dollars and cents

Add money in decimal notation

- A** correct
- B** subtracted
- C** did not include ones and tenths place from second addend





Office of Standards and Assessment (OSA)  
Phone: 1-877-560-8378  
Website: [www.michigan.gov/baa](http://www.michigan.gov/baa)  
Email: [baa@michigan.gov](mailto:baa@michigan.gov)