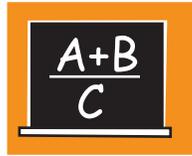


# Functional Independence

Fall 2011



## Mathematics

### *Item Descriptors*

**Grade 6**

**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 © 2011, 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.05.FI.EG09:** Create, describe, and extend simple number patterns

Identify pattern that matches given description

- A** correct
- B** increasing pattern, but by incorrect amount
- C** increasing pattern, but by incorrect amount

**2 N.ME.05.FI.EG03:** Represent whole numbers to 10,000

Given key & diagram, identify number

- A** 11 less than total
- B** correct
- C** 10 more than total

**3 M.UN.05.FI.EG02:** Select appropriate units of measure

Identify unit of measure for distance

- A** unit of measure for volume
- B** unit of measure for temperature
- C** correct

**4 M.UN.05.FI.EG02:** Select appropriate units of measure

Identify unit of measure for weight

- A** unit of measure for length
- B** unit of measure for time
- C** correct

**5 M.UN.05.FI.EG05:** Measure lengths to the nearest inch

Measure length to nearest inch

- A** under by one inch
- B** correct
- C** over by one inch

**6 M.UN.05.FI.EG01:** Select and use standard tools for measurement

Identify tool used to measure weight

- A** tool used to measure length
- B** tool used to measure volume
- C** correct

- 7 M.PS.05.FI.EG08:** Solve one-step word problems
- Add increase to temperature
- A** subtracted
  - B** incorrect addition
  - C** correct
- 8 G.GS.05.FI.EG01:** Identify, describe, and compare two-dimensional shapes
- Given diagram, identify name of shape
- A** incorrect 2-D shape
  - B** incorrect 2-D shape
  - C** correct
- 9 G.LO.05.FI.EG02:** Use relative position of objects on a plane and in space
- Determine relative position of two objects
- A** correct
  - B** incorrect position
  - C** incorrect position
- 10 M.UN.05.FI.EG09:** Identify and use different coins and bills
- Given value in whole dollars, identify corresponding photo of bills
- A** correct
  - B** 5-dollar bill has value of one dollar
  - C** 10-dollar bill has value of five dollars
- 11 M.UN.05.FI.EG10:** Recognize equivalent sets of coins and bills
- Identify matching set of coins given bill and coin
- A** correct
  - B** nickels = quarters  
quarters = dimes  
dime = nickel
  - C** quarter = dollar  
dime = nickel
- 12 M.PS.05.FI.EG12:** Add and subtract money in dollars and cents
- Add money in word problem
- A** omitted one of addends
  - B** correct
  - C** incorrect addition

- 13 M.UN.05.FI.EG09:** Identify and use different coins and bills

Given value in dollars and cents, identify matching set of bills and coins

- A** 1-dollar bill has value of five dollars
- B** 5-dollar bill has value of ten dollars
- C** correct

- 14 M.UN.05.FI.EG01:** Select and use standard tools for measurement

Identify tool used to measure weight

- A** tool used to measure time
- B** correct
- C** tool used to measure length

- 15 M.PS.05.FI.EG03:** Measure and compare integer temperatures

Read thermometer in °F

- A** did not use scale
- B** correct
- C** nearest 10°

- 16 M.PS.05.FI.EG08:** Solve one-step word problems

Subtract whole number of quarts

- A** subtrahend
- B** correct
- C** added

- 17 D.RE.05.FI.EG02:** Draw predictions and conclusions from data

Interpret bar graph: find maximum value

- A** neither maximum nor minimum
- B** minimum, not maximum
- C** correct

- 18 D.RE.05.FI.EG02:** Draw predictions and conclusions from data

Interpret bar graph: find maximum value

- A** neither maximum nor minimum
- B** minimum, not maximum
- C** correct

- 19 D.RE.05.FI.EG03:** Describe the shape of data

Interpret trend of data in chart

- A** incorrect trend
- B** correct
- C** incorrect trend

- 20 N.ME.05.FI.EG01:** Read, write and count whole numbers to 10,000

Translate word form of number into standard form

- A** incorrect in ones place
- B** correct
- C** transposed tens and ones

- 21 N.ME.05.FI.EG02:** Recognize representations for whole numbers to 10,000

Translate standard form of number into expanded form

- A** correct
- B** sum of face value of each digit
- C** thousands = hundreds  
hundreds = tens  
tens = ones

- 22 N.ME.05.FI.EG06:** Compare and order numbers to 10,000

Determine number greater than given number

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

- 23 N.ME.05.FI.EG03:** Represent whole numbers to 10,000

Given key and blocks, translate to standard form

- A** 100 less than total
- B** 30 less than total
- C** correct

- 24 N.ME.05.FI.EG02:** Recognize representations for whole numbers to 10,000

Identify equivalent addition expression

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

- 25 N.ME.05.FI.EG07:** Count numbers to 10,000 by 1s and to 1,000 by 2s, 5s, 10s, and 100s

Determine number of objects in array

- A** twice the correct total
- B** correct
- C** length + width

- 26 N.ME.05.FI.EG07:** Count numbers to 10,000 by 1s and to 1,000 by 2s, 5s, 10s, and 100s

Count by 100's to find total

- A** 500 less than total
- B** 100 less than total
- C** correct

- 27 N.ME.05.FI.EG06:** Compare and order numbers to 10,000

Determine number greater than given number

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

- 28 N.ME.05.FI.EG05:** Express numbers to 10,000 using place value

Determine number with given value in tens place

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

- 29 N.MR.05.FI.EG13:** Solve simple open sentences for +/-

Find missing addend in number sentence

- A** 10 less than addend
- B** correct
- C** 10 greater than addend

- 30 N.FL.05.FI.EG11:** Use addition properties of 0

Solve word problem with 0 as one of addends

- A** half of first addend
- B** correct
- C** twice the first addend

**31 N.FL.05.FI.EG11:** Use addition properties of 0

Add 0 to 2-digit number

- A** correct
- B** added 1
- C** added 10

**32 N.FL.05.FI.EG12:** Add and subtract two numbers with 1 or 2 digits

Subtract 1-digit number from 2-digit number

- A** correct
- B** added
- C** minuend

**33 N.MR.05.FI.EG15:** Select appropriate numbers to solve problems

Add three 2-digit numbers

- A** sum of first two addends
- B** sum of second two addends
- C** correct

**34 N.FL.05.FI.EG14:** Apply estimation in solving problems

Estimate difference

- A** underestimate
- B** correct
- C** overestimate

**35 N.FL.05.FI.EG14:** Apply estimation in solving problems

Estimate sum

- A** underestimate (subtracted)
- B** correct
- C** overestimate







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