Functional Independence
Fall 2012
Mathematics

Item Descriptors

Grade 7

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**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
   - Identify next term in pattern of sums
     - A. second addend over by 2
     - B. correct
     - C. second addend under by 2

2. **N.MR.06.FI.EG06:** Find the next number in a simple repeating pattern
   - Identify pattern that matches given description
     - A. increasing by given value, instead of decreasing
     - B. increasing and decreasing
     - C. correct

3. **M.UN.06.FI.EG02:** Select appropriate units of measure
   - Select unit of measure for volume
     - A. unit of measure for length
     - B. unit of measure for temperature
     - C. correct

4. **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
5 M.UN.06.FI.EG07: Tell time on a radial or digital clock to the nearest hour

Tell time to nearest hour on analog clock

A minute hand = hour hand
B correct
C sum of minute hand and hour hand

6 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

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

Given time, identify clock

A correct
B incorrect clock
C incorrect clock

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

Interpret map to determine driving direction

A opposite direction
B correct
C incorrect direction
10 **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

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

Given time, find earlier time

A correct
B added, instead of subtracted
C incorrect subtraction

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

Subtract lengths in feet

A subtrahend
B correct
C added

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

Multiply or use repeated addition in word problem

A factor (or addend)
B incorrect total (used only 2 of 3 addends or used incorrect factor)
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.EG02:** Recognize equivalent representations for whole numbers to 10,000

Identify addends given sum

A  \( ab = a + b0 \)
B  \( ab = a + b \)
C  correct

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

Determine number less than given number

A  greater than given number
B  greater than given number
C  correct

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

Translate expanded form to standard form

A  correct
B  \( a,000+b0+c=a,b0c \)
C  \( a,000+b0+c=a,bc0 \)

19 **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

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

Interpret bar graph

A  incorrect month
B  incorrect month
C  correct

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

 Match multiplication expression to array

 A correct
 B missing one column
 C extra row and extra column

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.ME.06.FI.EG11:** Understand division

 Translate word problem to division expression

 A addition expression
 B correct
 C subtraction expression

26 **N.FL.06.FI.EG10:** Multiply numbers up to 5 x 5

 Multiply in word problem

 A subtracted
 B added
 C correct

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

 Translate word problem to division expression

 A subtraction expression
 B addition expression
 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.EG16: Solve applied problems

Determine fraction of cookies eaten

A correct
B ratio of cookies eaten to remaining
C incorrect fraction

30 N.MR.06.FI.EG16: Solve applied problems

Subtract in word problem

A correct
B incorrect difference
C subtrahend

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

Estimate addition in word problem

A correct
B overestimate by 10
C overestimate by 20

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

Given coins, identify matching set of coins

A correct
B same set without 2 dimes
C set needs one more dime

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

Given photo of coins, calculate value

A over by 10 cents
B correct
C dime is worth one cent
34 **M.PS.06.FI.EG11**: Tell the amount of money in dollars and cents

Given decimal notation of money, identify matching photo of bills and coins

A correct
B $1 = $10, set needs nickel
C set needs one more dime

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