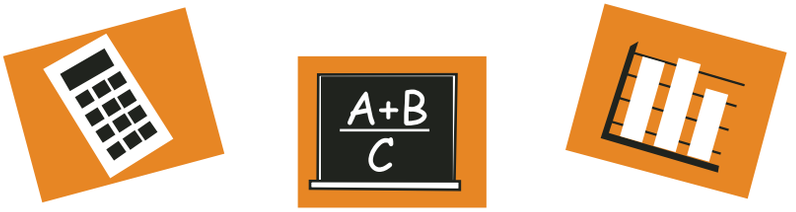
MI Access™
Michigan's Alternate Assessment Program

# Functional Independence

Fall 2012




# Mathematics

## *Item Descriptors*

**Grade 8**

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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.07.FI.EG06:** Create, describe, and extend simple number patterns

Interpret constant pattern in table

**A** correct

**B** rounded up to next dollar

**C** over by $1

**2** **N.MR.07.FI.EG07:** Find the next number in a simple repeating pattern

Determine rule for skip-counting pattern

**A** one hundred = ten

**B** correct

**C** one hundred = one thousand

**3** **N.ME.07.FI.EG01:** Read, write, and count using whole numbers to 100,000

Translate word form of number to standard form

**A** incorrect in tens place

**B** correct

**C** incorrect in hundreds place

**4** **N.ME.07.FI.EG02:** Recognize equivalent representations for whole numbers to 100,000

Given key and blocks, determine value shown

**A** one hundred = ten thousand, ten = one hundred

**B** one hundred = one thousand, ten = one hundred

**C** correct

**5** **N.ME.07.FI.EG03:** Express numbers to 100,000 using place value

Determine number with given place value

**A** under by factor of 10

**B** over by factor of 10

**C** correct

**6** **N.ME.07.FI.EG04:** Compare and order numbers to 100,000

Order three 3-digit numbers from least to greatest

**A** correct

**B** mixed order

**C** mixed order

**7** **M.UN.07.FI.EG02:** Select appropriate units of measure

Select unit of measure for area

**A** correct

**B** unit of measure for volume

**C** unit of measure for length

**8** **M.UN.07.FI.EG01:** Select and use standard tools for measurement

Read thermometer in °F

**A** less than correct temperature

**B** correct

**C** temperature above highest shown on thermometer

**9** **M.UN.07.FI.EG04:** Measure lengths to the nearest quarter-inch

Measure length to nearest quarter inch

**A** over by 1/2 inch

**B** correct

**C** under by 1/4 inch

**10** **M.UN.07.FI.EG08:** Measure perimeter

Calculate perimeter of rectangle given lengths of four sides

**A** correct

**B** 4 times the width

**C** 4 times the length

**11 G.LO.07.FI.EG02:** Find and name locations using simple coordinate systems

Locate point on 1st coordinate grid

**A** correct

**B** (x, y) = (y, x)

**C** (x, y) = (y, y)

**12 G.LO.07.FI.EG03:** Read, interpret, and use maps and grids with legends

Follow directions to find location

**A** incorrect location

**B** incorrect location

**C** correct

**13 G.LO.07.FI.EG03:** Read, interpret, and use maps and grids with legends

Interpret map to find direction

**A** incorrect direction

**B** opposite direction

**C** correct

**14 M.UN.07.FI.EG09:** Convert units of measure

Convert feet to inches given 1 foot = 12 inches

**A** subtracted feet from inches

**B** added feet to inches

**C** correct

**15 M.UN.07.FI.EG10:** Tell time on a radial or digital clock to the nearest half-hour

Tell time on analog clock

**A** half hour earlier

**B** correct

**C** hour later

**16 M.UN.07.FI.EG11:** Use equivalent calendar units

Convert hours to days

**A** incorrect number of hours

**B** incorrect number of hours

**C** correct

**17** **M.PS.07.FI.EG12:** Solve one- or two-step word problems

Calculate elapsed time

**A** correct

**B** 30 minutes = 1 hour

**C** 30 minutes = 2.5 hours

**18** **D.RE.07.FI.EG01:** Read data from charts, tables, graphs, tallies, and pictographs

Translate data into bar graph

**A** all 3 bars incorrect

**B** correct

**C** two incorrect bars

**19** **D.RE.07.FI.EG03:** Describe the shape of data using informal language

Describe data in line graph

**A** correct

**B** opposite trend

**C** incorrect trend

**20** **D.RE.07.FI.EG04:** Solve problems using data in tables, graphs, tallies, and pictographs

Interpret graph

**A** correct

**B** incorrect category

**C** did not use scale

**21** **N.FL.07.FI.EG09:** Add and subtract one-, two-, and three-digit numbers

Add two 2-digit numbers

**A** twice the sum

**B** correct

**C** 10 less than sum

**22** **N.MR.07.FI.EG10:** Solve simple open sentences

Solve subtraction sentence for minuend

**A** subtracted subtrahend from difference

**B** under by 5

**C** correct

**23 N.FL.07.FI.EG13:** Calculate simple products

Multiply or use repeated addition in word problem

**A** used incorrect factor (or did not include one addend)

**B** under by 5

**C** correct

**24 M.PS.07.FI.EG14:** Tell the amount of money in dollars and cents

Given bills, determine total value

**A** five-dollar bill has value of one dollar

**B** correct

**C** five-dollar bill has value of ten dollars

**25 M.UN.07.FI.EG13:** Recognize equivalent sets of coins and bills

Recognize equivalent set of coins

**A** over by 1 dime

**B** correct

**C** nickel instead of quarter

**26 N.ME.07.FI.EG16:** Place 0 and halves on a number line

Identify shape at given location on number line

**A** correct

**B** under by 2

**C** over by 1

**27 N.ME.07.FI.EG20:** Understand sum of unit fractions

Identify unit fractions given sum

**A** a/b = a/b + a/b + a/b

**B** a/b = 1/b + a/b

**C** correct

**28** **N.ME.07.FI.EG15:** Recognize, name, represent, and write commonly used unit fractions

Identify shaded figure

**A** correct

**B** too much shading

**C** not enough shading

**29** **N.MR.07.FI.EG18:** Compare and order fractions within the same fraction family

Order three fractions from least to greatest

**A** correct

**B** mixed order

**C** greatest to least

**30** **N.MR.07.FI.EG21:** Multiply fractions by whole numbers

Identify equivalent expression to multiplying a whole number by a unit fraction

**A** correct

**B** a x 1/b = a + a + … + a (b addends)

**C** a x 1/b = a + 1/b + …+ a + 1/b (b addends)

**31** **N.MR.07.FI.EG24:** Select appropriate numbers to solve problems

Add two 3-digit numbers in context

**A** correct

**B** included extra addend

**C** included two extra addends

**32** **N.MR.07.FI.EG25:** Solve applied problems

Multiply two 2-digit numbers

**A** under by 5

**B** correct

**C** over by 5

**33** **N.FL.07.FI.EG23:** Apply estimation in solving problems

Estimate subtraction in context

**A** overestimate

**B** overestimate

**C** correct

**34** **A.FO.07.FI.EG02:** Represent information using algebra

Translate multiplication word problem into number sentence

**A** addition sentence

**B** division sentence

**C** correct

**35** **A.FO.07.FI.EG02:** Represent information using algebra

Translate division word problem into number sentence

**A** correct

**B** multiplication sentence

**C** addition sentence

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