MI Access ™
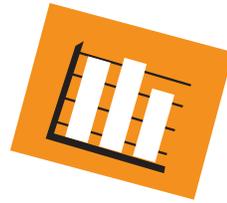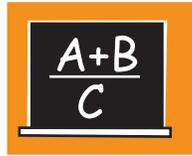**Michigan's Alternate Assessment Program**

Functional Independence
Spring 2012

Mathematics

Item Descriptors

Grade 11

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.

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 Benchmark (EB) and the second statement or problem is the descriptor for the item's stem or question.

1 **F.11.FI.EB01:** Create, describe, and extend simple number patterns

Find last number in skip-counting pattern

A added 1, instead of 3

B correct

C added 20, instead of 3

2 **F.11.FI.EB02:** Find the next number in a simple repeating pattern

Determine rule for skip-counting pattern

A correct

B divided, instead of subtracting

C added, instead of subtracting

3 **F.11.FI.EB03:** Identify, describe, and extend patterns found in daily life

Find next time in given pattern involving time

A subtracted 30 minutes, instead of adding

B correct

C added 60 minutes, instead of 30 minutes

4 **F.11.FI.EB01:** Create, describe, and extend simple number patterns

Find last number in skip-counting pattern

A correct

B subtracted 1, instead of 4

C added 1, instead of subtracting 4

5 **G.11.FI.EB01:** Select and use standard tools for measurement

Determine amount of water in measuring cup

A correct

B fraction value shown on cup above the water

C amount in cup without water

6 **G.11.FI.EB04:** Read gauges and meters

Read depth gauge

A less than correct depth

B correct

C used scale of 2, instead of 1

7   **G.11.FI.EB02:** Select appropriate units of measure

Select unit of measure for height

A   unit for temperature

B   inappropriate unit for context

C   correct

8   **G.11.FI.EB08:** Measure perimeter

Find perimeter of rectangle given length and width

A   area = perimeter

B   length + width

C   correct

9   **G.11.FI.EB05:** Measure lengths to the nearest eighth-inch

Measure pencil in inches

A   correct

B   1/4 inch greater than correct length

C   1/2 inch greater than correct length

10   **G.11.FI.EB09:** Convert measurements of length

Convert yards to feet

A   added yards to 3 feet

B   correct

C   1 yard = 12 feet

11   **G.11.FI.EB10:** Tell time on a radial or digital clock to the nearest 5 minutes

Add 5 minutes to time shown on radial clock

A   subtracted 5 minutes

B   correct

C   added 5 hours

12   **G.11.FI.EB12:** Use a calendar and equivalent calendar units

Convert weeks to days

A   number of days in 1 week

B   correct

C   1 week = 10 days

13 G.11.FI.EB14: Solve one- and two-step word problems

Subtract measurement in inches in context

A   correct

B   10 inches greater than correct length

C   added

14 G.11.FI.EB13: Read and interpret schedules

Interpret schedule shown on calendar

A   next day after last term shown in pattern

B   did not follow pattern

C   correct

15 G.11.FI.EB15: Recognize equivalent sets of coins and bills

Determine equivalent amounts of money

A   different amounts

B   different amounts

C   correct

16 G.11.FI.EB17: Add and subtract money in dollars and cents

Subtract money given in decimal notation

A   subtracted smaller values from greater values

B   correct

C   correct dollar amount, incorrect number of cents

17 G.11.FI.EB20: Read, interpret, and use maps and grids with legends

Interpret map

A   location is given number of blocks west, instead of east

B   correct

C   location is given number of blocks north, instead of east

18 G.11.FI.EB19: Find and name locations using simple coordinate systems

Name location of point on coordinate grid

A $(x + 1, y + 1)$

B (y, x)

C   correct

19 G.11.FI.EB20: Read, interpret, and use maps and grids with legends

Describe directions to location on map

A   incorrect directions

B   incorrect directions

C   correct

20 G.11.FI.EB19: Find and name locations using simple coordinate systems

Interpret map grid

A   incorrect location

B   incorrect location

C   correct

21 D.11.FI.EB04: Describe the shape of data using informal language

Describe data in line graph

A   correct

B   opposite description

C   incorrect description

22 D.11.FI.EB03: Draw predictions and conclusions from data in tables, graphs, and charts

Interpret pattern shown in table

A   previous day's value

B   added 1, instead of 8

C   correct

23 N.11.FI.EB01: Read, write, and count using whole numbers to 100,000

Add 1 to given amount

A   correct

B   10 times correct sum

C   100 times correct sum

24 N.11.FI.EB05: Round whole numbers

Round number to nearest 10

A   rounded to nearest hundred

B   rounded down a number greater than 5

C   correct

25 **N.11.FI.EB02:** Recognize equivalent representations for whole numbers to 100,000

Select addition expression that equals given sum

A   correct

B   over by 1

C   over by 2

26 **N.11.FI.EB03:** Express numbers to 100,000 using place value

Translate word form of number into standard form

A   thousand = hundred, hundred = ten

B   hundred = ten

C   correct

27 **N.11.FI.EB10:** Understand percentages

Translate percent notation into words

A   ab% means a out of b

B   ab% means ab out of 10

C   correct

28 **N.11.FI.EB13:** Recognize, name, represent, and write fractions

Identify shaded rectangles that match given fraction, x/y

A   correct

B   model with x shaded rectangles and y nonshaded rectangles

C   model with x + y rectangles, completely shaded

29 **N.11.FI.EB12:** Solve word problems involving percentages

Calculate amount of sales tax given tax rate and monetary value

A   incorrect amount

B   incorrect amount

C   correct

30 **N.11.FI.EB17:** Round money

Round money in decimal notation to nearest dollar

A   rounded down amount over 50 cents

B   rounded to nearest dime

C   correct

31 N.11.FI.EB15: Add and subtract two fractions with like denominators

Add two fractions with like denominators

A   added numerators and denominators

B   correct

C   subtracted

32 N.11.FI.EB14: Compare and order fractions

Identify unit fraction with greatest value

A   correct

B   fraction with neither the greatest nor least value

C   fraction with least value

33 N.11.FI.EB18: Add, subtract, multiply, and divide decimal fractions in relation to money

Add and multiply with money in context

A   over by $1

B   correct

C   amount for first purchase, did not include second purchase

34 N.11.FI.EB18: Add, subtract, multiply, and divide decimal fractions in relation to money

Add and subtract with money in context

A   correct

B   over by $1

C   amount of change due if one item not purchased

35 N.11.FI.EB19: Apply estimation in solving problems

Estimate sum

A   underestimate

B   correct

C   overestimate

36 N.11.FI.EB21: Solve applied problems

Divide with money in context

A   correct

B   incorrect quotient

C   incorrect quotient

37 N.11.FI.EB21: Solve applied problems

Multiply with money in context

A   under by more than $1

B   under by $1

C   correct

38 A.11.FI.EB03: Represent information using algebra

Identify equation that matches situation

A   correct

B   difference, instead of sum

C   addend + total = addend

39 A.11.FI.EB01: Solve applied problems involving rates

Divide in context

A   correct

B   added

C   multiplied

40 A.11.FI.EB02: Identify the unknown quantity

Identify addend

A   total divided by addend

B   correct

C   total + addend

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

QAI-90467