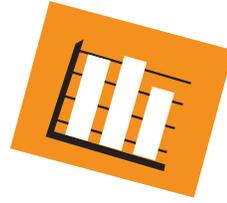
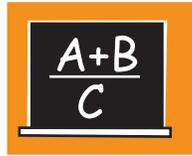


Functional Independence

Spring 2011



Mathematics

Item Descriptors

Grade 11

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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 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



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