

## **Functional Independence**

Fall 2012







## **Mathematics**

## Item Descriptors

Grade

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Mathematics – Grade 7 Item Descriptors

**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.

**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

**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

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**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
- $\mathbf{B} \quad ab = a + b$
- **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

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**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



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