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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.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> F.11.FI.EB01:</td>
<td>Create, describe, and extend simple number patterns</td>
</tr>
<tr>
<td></td>
<td>Find missing number in skip-counting pattern</td>
</tr>
<tr>
<td>A</td>
<td>added 1 to previous number</td>
</tr>
<tr>
<td>B</td>
<td>correct</td>
</tr>
<tr>
<td>C</td>
<td>over by 2</td>
</tr>
<tr>
<td><strong>2</strong> F.11.FI.EB02:</td>
<td>Find the next number in a simple repeating pattern</td>
</tr>
<tr>
<td></td>
<td>Find next number in decreasing skip-counting pattern</td>
</tr>
<tr>
<td>A</td>
<td>divided instead of subtracted</td>
</tr>
<tr>
<td>B</td>
<td>added instead of subtracted</td>
</tr>
<tr>
<td>C</td>
<td>correct</td>
</tr>
<tr>
<td><strong>3</strong> F.11.FI.EB03:</td>
<td>Identify, describe, and extend patterns found in daily life</td>
</tr>
<tr>
<td></td>
<td>Find next time in a given pattern involving time</td>
</tr>
<tr>
<td>A</td>
<td>subtracted 30 minutes, instead of adding</td>
</tr>
<tr>
<td>B</td>
<td>correct</td>
</tr>
<tr>
<td>C</td>
<td>added 60 minutes, instead of 30 minutes</td>
</tr>
<tr>
<td><strong>4</strong> F.11.FI.EB03:</td>
<td>Identify, describe, and extend patterns found in daily life</td>
</tr>
<tr>
<td></td>
<td>Use calendar to extend given pattern</td>
</tr>
<tr>
<td>A</td>
<td>skip counted by difference between last two given dates</td>
</tr>
<tr>
<td>B</td>
<td>correct</td>
</tr>
<tr>
<td>C</td>
<td>date two days after correct date</td>
</tr>
</tbody>
</table>
5 G.11.FI.EB02: Select appropriate units of measure

Select appropriate unit to measure length

A correct
B unit of volume (capacity)
C inappropriate unit of length

6 G.11.FI.EB03: Measure and compare integer temperatures

Compare temperatures in degrees Fahrenheit

A half of correct difference
B correct
C temperature on 2nd thermometer

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

Identify tool for measuring height

A tool for measuring time
B tool for measuring weight
C correct

8 G.11.FI.EB04: Read gauges and meters

Interpret thermostat

A did not use scale
B correct
C 10 degrees over

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

Tell time on radial watch

A correct
B one hour later than correct time
C location of minute hand as hours, location of hour hand as minutes (times 5)

10 G.11.FI.EB08: Measure perimeter

Find perimeter of rectangle given length and width

A area = perimeter
B length + width
C correct
11 G.11.FI.EB11: Know equivalent calendar units

Convert years to months

A 1 year = 7 months
B correct
C 1 year = 18 months

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

Determine number of weeks between two dates given two calendars

A one less week than correct number of weeks
B correct
C one more week than correct number of weeks

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

Interpret bus schedule

A first arrival time at previous corner
B correct
C second arrival time at next corner

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

Subtract lengths in feet, two subtrahends

A correct
B subtracted only larger subtrahend
C sum of two subtrahends

15 G.11.FI.EB16: Tell the amount of money in dollars and cents

Given photos of bills and coins translate into decimal notation

A did not include one of the twenty-dollar bills
B dime = 5 cents
C correct

16 N.11.FI.EB16: Compare and order decimal fractions in relation to money

Compare money given in decimal notation

A incorrect comparison
B correct
C incorrect comparison
<table>
<thead>
<tr>
<th>Item Description</th>
<th>Grade 11 Item Descriptors</th>
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<tbody>
<tr>
<td><strong>17 G.11.FI.EB17:</strong> Add and subtract money in dollars and cents</td>
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</tr>
<tr>
<td>Add money given in decimal notation</td>
<td></td>
</tr>
<tr>
<td>A subtracted</td>
<td></td>
</tr>
<tr>
<td>B correct number of dollars and cents from first addend</td>
<td></td>
</tr>
<tr>
<td>C correct</td>
<td></td>
</tr>
<tr>
<td><strong>18 D.11.FI.EB05:</strong> Solve problems using data in tables, graphs, tallies, and pictographs</td>
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</tr>
<tr>
<td>Interpret chart with money given in decimal notation</td>
<td></td>
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<tr>
<td>A incorrect total</td>
<td></td>
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<tr>
<td>B correct</td>
<td></td>
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<tr>
<td>C incorrect total</td>
<td></td>
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<tr>
<td><strong>19 G.11.FI.EB19:</strong> Find and name locations using simple coordinate systems</td>
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</tr>
<tr>
<td>Name location of point on coordinate grid</td>
<td></td>
</tr>
<tr>
<td>A ((x + 1, y = 1))</td>
<td></td>
</tr>
<tr>
<td>B ((y, x))</td>
<td></td>
</tr>
<tr>
<td>C correct</td>
<td></td>
</tr>
<tr>
<td><strong>20 G.11.FI.EB19:</strong> Find and name locations using simple coordinate systems</td>
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</tr>
<tr>
<td>Interpret map grid</td>
<td></td>
</tr>
<tr>
<td>A incorrect location</td>
<td></td>
</tr>
<tr>
<td>B incorrect location</td>
<td></td>
</tr>
<tr>
<td>C correct</td>
<td></td>
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<tr>
<td><strong>21 G.11.FI.EB20:</strong> Read, interpret, and use maps and grids with legends</td>
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<tr>
<td>Use map to identify state relative to given state</td>
<td></td>
</tr>
<tr>
<td>A incorrect state</td>
<td></td>
</tr>
<tr>
<td>B state in opposite direction</td>
<td></td>
</tr>
<tr>
<td>C correct</td>
<td></td>
</tr>
<tr>
<td><strong>22 D.11.FI.EB07:</strong> Identify data needed to solve a problem</td>
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</tr>
<tr>
<td>Select description to determine total distance ran</td>
<td></td>
</tr>
<tr>
<td>A correct</td>
<td></td>
</tr>
<tr>
<td>B description for starting times</td>
<td></td>
</tr>
<tr>
<td>C description for elapsed time</td>
<td></td>
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</table>
23 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

24 N.11.FI.EB03: Express numbers to 100,000 using place value
Identify number with given number in thousands place
A correct
B ten thousands place
C hundreds place

25 N.11.FI.EB01: Read, write, and count using whole numbers to 100,000
Translate numeral to word form
A a0,bcd = ab,0cd
B 10,000 = 1,000
C correct

26 N.11.FI.EB04: Compare and order numbers to 100,000
Identify number less than given 4-digit number
A correct
B greater than given number
C greater than given number

27 N.11.FI.EB10: Understand percentages
Identify circle with given percentage of shading
A correct
B circle with less than given % of shading
C circle with considerably less than given % of shading

28 N.11.FI.EB11: Convert percentages
Translate ratio to percentage
A correct
B a/b0 = ba%
C 10% of correct value
32 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

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

Subtract 2 mixed numbers with like denominators

A incorrect whole number, correct fraction
B incorrect whole number, incorrect fraction
C correct

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

Determine fractional portion of shaded diagram

A correct numerator/incorrect denominator
B correct
C correct numerator/incorrect denominator

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

Determine largest of 3 given percentages

A correct
B intermediate percentage
C smallest percentage

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

List fractions from least to greatest

A correct
B mixed order
C mixed order
34 **N.11.FI.EB05**: Round whole numbers

Round 3-digit number to nearest hundred

- A rounded down number over 50
- B rounded to nearest tens place
- C correct

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

Determine amount of money given rate per hour and number of hours

- A incorrect total
- B used rate $1/hour less than correct rate
- C correct

37 **A.11.FI.EB01**: Solve applied problems involving rates

Divide in context

- A correct
- B added
- C multiplied

38 **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

39 **A.11.FI.EB02**: Identify the unknown quantity

Identify factor in multiplication equation

- A correct
- B product
- C product multiplied by given factor
40 **A.11.FI.EB03:** Represent information using algebra

Identify equation that matches situation

A  correct
B  difference, instead of sum
C  addend + total = addend