Name _____

Minnesota Comprehensive Assessments-Series III

Mathematics Item Sampler
Grade 3

Minnesota Department of
Education

Mathematics Test
General Directions

- This test contains four segments.

- You may use the grid paper at the back of this test book as scratch paper.

- For each question, choose the answer you think is best.

- Look at the sample that shows how to answer the question.

Sample Question Answered in Test Book:

$$20 - 8 =$$

A. 8

B. 10

C. 12

D. 16

- You **may not** use a calculator for Segment 1.

- You **may** use a calculator for Segments 2, 3, and 4.

- When you finish a segment of the test, stop and check your answers. You may not work on a different segment of the test. You will be told when to begin the next segment.

STOP

Mathematics Test — Segment 1

1. What is another way to show 4,608?

   A. 46+ 8

   B. 4,000+ 60+ 8

   C. 4,000+ 600+ 8

   D. 4,000+ 600+ 80

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2. There are 23,650 people in a stadium.

   The stadium can hold 1,000 more people.

   How many people can the stadium hold?

   A. 22,650

   B. 23,750

   C. 24,650

   D. 33,650

3. What is 153,924 rounded to the nearest thousand?

    A. 150,000

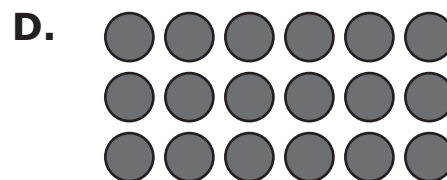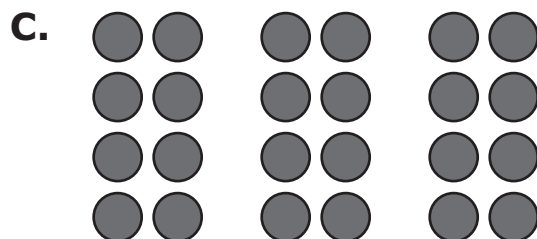   **B.** 153,000
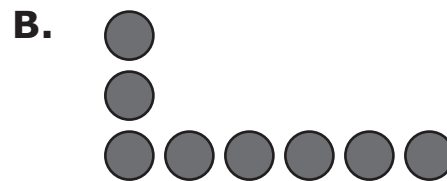
    C. 153,900

    D. 154,000

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4. Subtract.

$$6,905-37$$

    A. 3,205

    B. 6,868

    C. 6,932

    D. 6,968

5. Which model shows 6×3?

A.

B.

C.

D.

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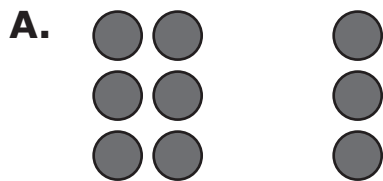
6. Malik has 64 marbles.

He puts an equal number of marbles into each of 4 jars.

How many marbles are in each jar?

A. 14

B. 15

C. 16

D. 18

7. Multiply.

$$507 \times 6$$

    A. 342

    B. 3,002

    C. 3,042

    D. 3,102

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8. Two lines are shown.
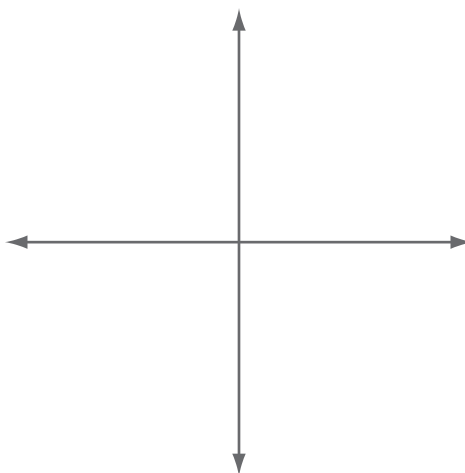
Which describes the relationship between the lines?

    A. Parallel

    B. Perpendicular

    C. Square

    D. Straight

Mathematics Test — Segment 2

9. Which number has a 5 in the ten thousands place?

    A. 104,352

    B. 365,971

    C. 582,607

    D. 951,480

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10. Connie lists her scores from a video game.

<div align="center">14,087 13,345 14,613 14,301</div>

Which list shows the scores listed from greatest to least?

    A. 14,613 13,345 14,301 14,087

    B. 14,613 14,301 14,087 13,345

    C. 14,087 14,613 14,301 13,345

    D. 13,345 14,087 14,301 14,613

11. Jeff had 1,350 glass beads and 695 clay beads.

He sold 138 glass beads and 47 clay beads.

How many beads did Jeff have left?

    A. 470

    B. 746

    C. 1,860

    D. 2,230

---

12. Cory has 2 red crayons and 1 blue crayon.

What fraction of Cory's crayons is red?

    A. $\dfrac{1}{3}$

    B. $\dfrac{1}{2}$

    C. $\dfrac{2}{3}$

    D. $\dfrac{3}{2}$

13. Gavin has 4 green apples and 4 red apples.

Tara has 4 green apples and 8 red apples.

Who has a greater fraction of green apples?

A. Gavin, because $\frac{4}{8}$ is greater than $\frac{4}{12}$

B. Tara, because $\frac{4}{12}$ is greater than $\frac{4}{8}$

C. Tara, because 12 is greater than 8

D. They both have the same fraction of green apples.

14. Ellen has a vase of flowers.

- $\frac{1}{8}$ are red.

- $\frac{1}{3}$ are blue.

- $\frac{1}{6}$ are purple.

- $\frac{1}{4}$ are yellow.

Which is the greatest fraction?

A. $\frac{1}{8}$

B. $\frac{1}{3}$

C. $\frac{1}{6}$

D. $\frac{1}{4}$

15. A table is shown.

Input	Output
2	12
4	24
8	48

What is the output number when the input number is 12?

A. 2

B. 60

C. 72

D. 96

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16. Which story problem can be solved using the number sentence $2 \times n = 18$?

A. Tom had 18 pencils. He gave *n* pencils away and had 2 left over. How many pencils did Tom give away?

B. Alice bought *n* books and spent $18. Each book cost $2. How many books did Alice buy?

C. Maya had *n* rocks and 2 baskets. She put 18 rocks in each basket. How many rocks did Maya have?

D. Pedro saw 2 kinds of birds. He saw 18 robins and *n* crows. How many crows did Pedro see?

Go on to the next page.

17. An equation is shown.

$$3 \times 7 = \underline{\hspace{1cm}} + 7$$

What number makes the number sentence true?

A. 3

B. 14

C. 21

D. 28

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18. Which shape has the fewest angles?

A. Hexagon

B. Octagon

C. Pentagon

D. Trapezoid

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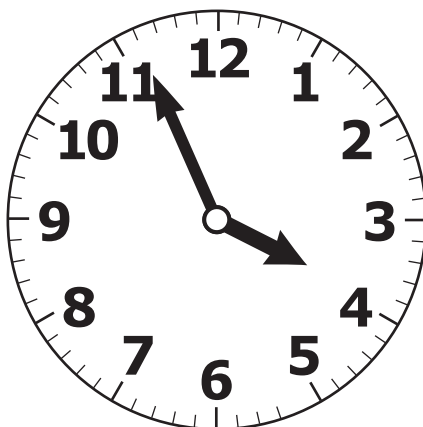**19.** The perimeter of a rectangle is 16 inches.

Its length is 5 inches.

What is its width?

A. 3 inches

B. 6 inches

C. 11 inches

D. 21 inches

20. Mai Ka starts reading a book at the time shown on the clock.

She stops reading 1 hour and 12 minutes later.

What time does Mai Ka stop reading?

A. 4:08

B. 4:44

C. 5:04

D. 5:08

Go on to the next page.

21. A movie is 2 hours and 28 minutes long.

How many minutes long is the movie?

    A. 88 minutes

    B. 120 minutes

    C. 148 minutes

    D. 228 minutes

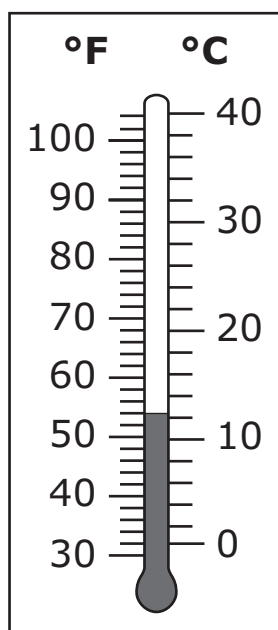**22.** Gina buys a snack for 59¢.

She pays with a $1 bill.

She receives the fewest possible coins in change.

What change does Gina receive?

    A. 1 quarter, 1 dime, 1 nickel, and 1 penny

    B. 2 quarters and 1 penny

    C. 2 quarters, 1 nickel, and 4 pennies

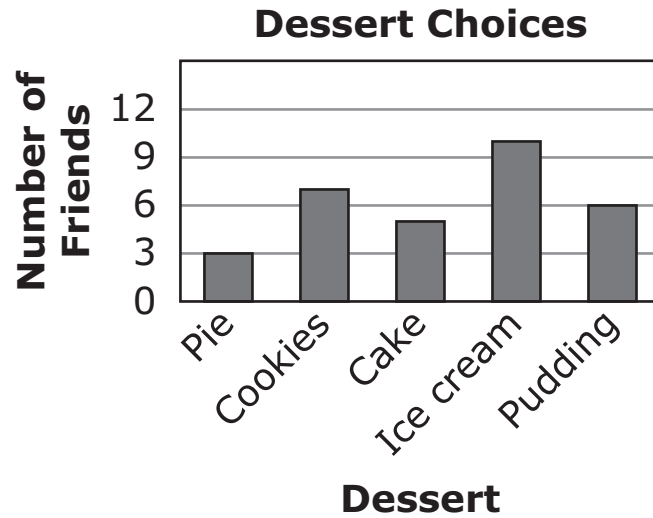   **D.** 4 dimes and 1 penny

23. A thermometer is shown.

What temperature is shown on the thermometer?

A. 11°C

B. 12°F

C. 54°C
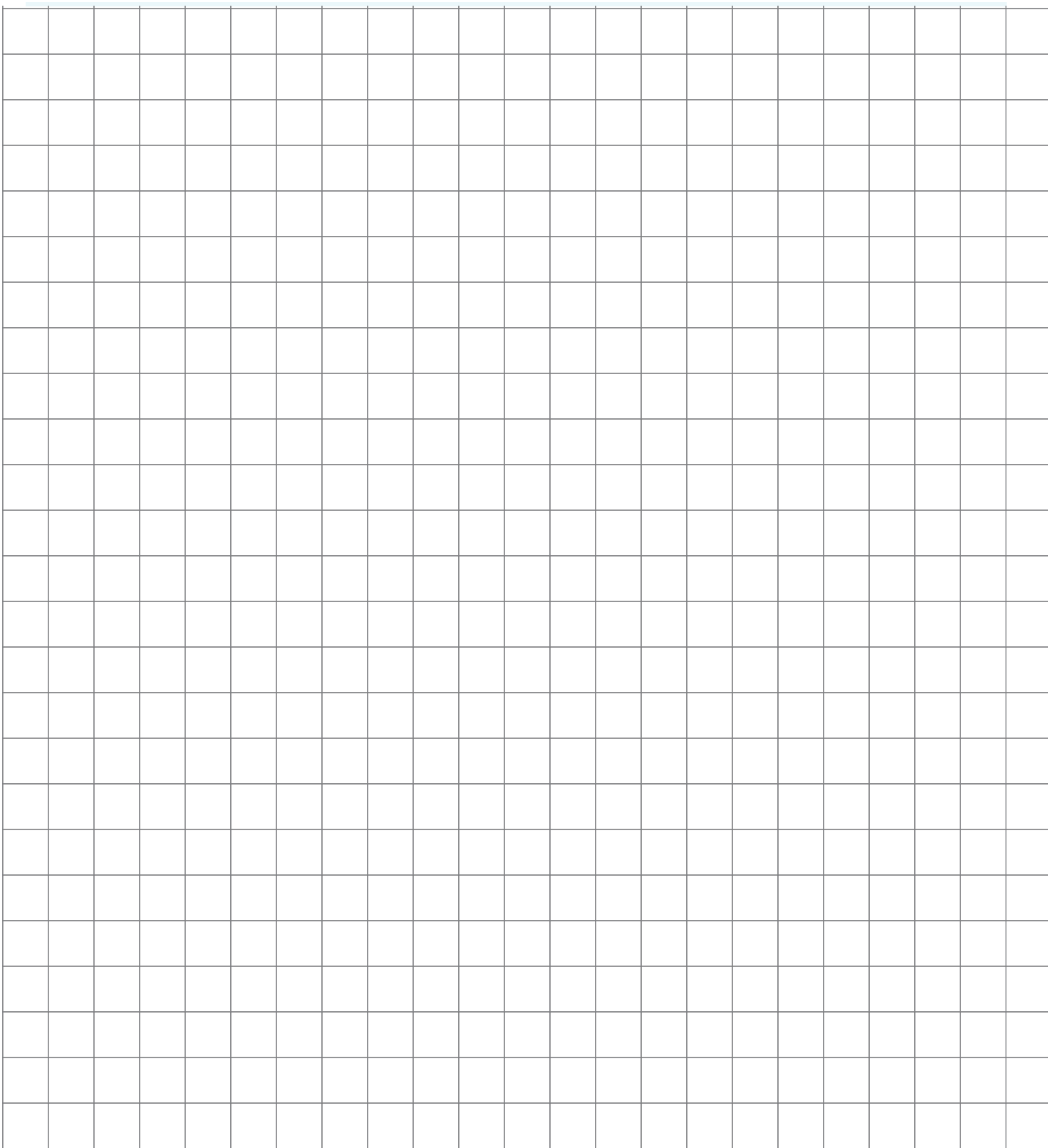
D. 54°F

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24. Leon asked his friends to choose a favorite dessert.

Dessert Choices

How many more friends chose ice cream than pie?

A. 2

B. 5

C. 7

D. 10

Go on to the next page.

Grade 3 Teacher's Guide

MCA-III Item Sampler Answer Key
Grade 3 Math

Item #	Correct Answer	Item Type	Strand	Standard	Benchmark
1	C	MC	1	1	01
2	C	MC	1	1	03
3	D	MC	1	1	04
4	B	MC	1	2	01
5	D	MC	1	2	03
6	C	MC	1	2	04
7	C	MC	1	2	05
8	B	MC	3	1	01
9	D	MC	1	1	02
10	B	MC	1	1	05
11	C	MC	1	2	02
12	C	MC	1	3	01
13	A	MC	1	3	02
14	B	MC	1	3	03
15	C	MC	2	1	01
16	B	MC	2	2	01
17	B	MC	2	2	02
18	D	MC	3	1	02
19	A	MC	3	2	02
20	D	MC	3	3	01
21	C	MC	3	3	02
22	A	MC	3	3	03
23	D	MC	3	3	04
24	C	MC	4	1	01

Grade 3 Teacher's Guide

Item # — The number of the question in the Item Sampler.

Correct Answer — Answers to multiple-choice questions are listed.

Item Type — Multiple Choice **(MC)**

Strand — In mathematics, the MCA-III measures four strands:

1. Number and Operation
2. Algebra
3. Geometry and Measurement
4. Data Analysis and Probability

Standard — Each strand has one or more standards

Benchmark — Each standard has one or more benchmarks. See the Academic Standards or test specification for further explanation of each benchmark.