Not for student use. Use in conjunction with a paper mathematics item sampler.

# Minnesota Comprehensive Assessments-Series III

Mathematics Item Sampler Script Grade 6

ITEM SAMPLERS ARE NOT SECURE TEST MATERIALS. THIS ITEM SAMPLER SCRIPT MAY BE COPIED OR DUPLICATED.

Minnesota Department of Education

### MINNESOTA COMPREHENSIVE ASSESSMENTS ITEM SAMPLER GRADE 6 MATHEMATICS SCRIPT

# INSTRUCTIONS CONTAINED IN THE ITEM SAMPLER REFLECT THE CONTENT OF THE ACTUAL TEST AND MAY NOT APPLY TO THE ADMINISTRATION OF THE ITEM SAMPLER.

This script is for the Test Monitor only; it is not for students. This script is the **only** source a Test Monitor may use to read the Mathematics MCA test to students. **This script must be used in conjunction with the grade 6 Mathematics MCA regular print, large print, or Braille test book.** For Braille, Test Monitors should also refer to the *Test Administrator Notes* included with the Braille test book.

GENERAL INSTRUCTIONS FOR TEST MONITORS:

- Prior to test administration, review the *Test Monitor and Student Directions for Paper A ccommodations for MCA* for detailed policy and procedure information for test administration (e.g., stopping testing for the day).
- Before students start the test, read the applicable from the *Test Monitor and Student Directions for Paper Accommodations for MCA* to students to instruct them about testing procedures.
- Read aloud to students ONLY what is in BOLD TYPE.

Say the following before you begin reading the questions on the next page:

After I read each question, I will pause for as much time as you need to answer the question. Then I will read the next question. You may ask me to repeat any question as many times as you need.

#### GRADE 6 MATHEMATICS MCA SCRIPT SEGMENT 1

We will now begin Segment One (1). You MAY NOT use a calculator for this segment.

**Question number one** (1):

Which is equivalent to four to the third power  $(4^3)$ ?

Choose answer A, B, C, or D.

**Question number two (2):** 

Divide (the expression shown).

Choose answer A, B, C, or D.

**Question number three** (3):

Riley has two hundred (200) stamps.

- Thirty-five percent (35%) are from Europe.
- Ten percent (10%) are from Asia.
- Twenty percent (20%) are from Australia.

The rest of the stamps are from North America. How many of Riley's stamps are from North America?

Choose answer A, B, C, or D.

**Question number four** (4):

What is the prime factorization of six hundred thirty (630)?

Choose answer A, B, C, or D.

**Question number five (5):** 

An equation is shown.

When the value of k increases by two (2), by what amount does the value of j increase?

Choose answer A, B, C, or D.

**Question number six (6):** 

A graph is shown.

What is the equation of the line on the graph?

Choose answer A, B, C, or D.

**Question number seven** (7):

Simplify (the expression shown).

Choose answer A, B, C, or D.

**Question number eight** (8):

A rhombus is shown.

The figure is labeled: "seventy-five degrees (75°)."

The rhombus is used to make a design.

The figure is labeled: "one (1)."

What is the measure of angle one  $(m \angle 1)$ ?

Choose one of the following answers. (Read answers aloud.)

- **A.** Fifteen degrees (15°)
- **B.** Seventy-five degrees (75°)
- **C. One hundred five degrees** (105°)
- **D. One hundred fifty degrees** (150°)

## STOP

This is the end of Segment One (1) of your mathematics test.

If you want to check your answers, you may do so now. You may ask me to repeat any question. You will not be able to come back to these questions later.

Pause while the student checks his or her answers.

After you have checked your answers, seal this segment of your test book.

#### GRADE 6 MATHEMATICS MCA SCRIPT SEGMENT 2

We will now begin Segment Two (2). You MAY use a calculator for this segment.

**Question number nine** (9):

Which statement is true?

Choose answer A, B, C, or D.

**Question number ten** (10):

Kelly makes twelve (12) candles in three (3) hours. Lee makes six (6) candles in one (1) hour. What is the difference in the numbers of candles they each make in eight (8) hours?

Choose answer A, B, C, or D.

**Question number eleven** (11):

A bottle of soap costs three dollars and forty-five cents (\$3.45) for sixty-four (64) ounces. What is the cost per ounce?

Choose one of the following answers. (Read answers aloud.)

- **A.** Five cents (\$0.05)
- **B.** Nineteen cents (\$0.19)
- C. Twenty-two cents (\$0.22)
- **D.** Sixty-four cents (\$0.64)

ITEM SAMPLER MAY BE DUPLICATED.

**Question number twelve** (12):

A company is printing two hundred fifty (250) calendars. In one (1) hour, seventyfive (75) calendars are printed. What percent of the calendars are printed in one (1) hour?

Choose one of the following answers. (Read answers aloud.)

- A. Three percent (3%)
- **B.** Three point three percent (3.3%)
- C. Thirty percent (30%)
- **D.** Thirty-three percent (33%)

**Question number thirteen** (13):

The surface area of a cube is three hundred eighty-four (384) square inches. What is the volume of the cube?

Choose one of the following answers. (Read answers aloud.)

- A. Eight (8) cubic inches
- **B.** Sixteen (16) cubic inches
- C. Two hundred fifty-six (256) cubic inches
- **D.** Five hundred twelve (512) cubic inches

**Question number fourteen** (14):

A heart shape is cut from a gridded piece of paper.

What is the approximate area of the heart?

Choose one of the following answers. (Read answers aloud.)

- A. Fifty (50) square units
- **B.** Seventy (70) square units
- C. Ninety (90) square units
- **D. One hundred forty-four** (144) **square units**

**Question number fifteen** (15):

Joleen bought twelve (12) apples. Each apple weighed one point eight (1.8) ounces. How many pounds of apples did Joleen buy?

Choose one of the following answers. (Read answers aloud.)

- **A. One point three five** (1.35) **pounds**
- **B. Two point four** (2.4) **pounds**
- C. Twenty-one point six (21.6) pounds
- **D.** Twenty-eight point eight (28.8) pounds

**Question number sixteen** (16):

Please write your answer in the space below the question. You may use the digits: 0-9 and the symbols: slash for a fraction bar (/) and a decimal (.).

Eli has a cube with sides numbered one through six (1–6) and a spinner with three (3) equal sections labeled A, B, and C. He rolls the cube and spins the spinner. How many outcomes are possible?

**Question number seventeen** (17):

Four students each flipped a coin fifty (50) times and recorded the results in the table.

The table has four (4) rows and three (3) columns. The column headings are labeled from left to right: "Student," "Heads," "Tails." The Student column is labeled from top to bottom: "Mai Ka," "Heather," "Jose," "Tyrone."

Who had a relative frequency of three-fifths  $(\frac{3}{5})$  of flipping tails?

Choose one of the following answers. (Read answers aloud.)

- A. Mai Ka
- B. Heather
- C. Jose
- D. Tyrone

**Question number eighteen** (18):

Which is equivalent to zero point zero four percent (0.04%)?

Choose answer A, B, C, or D.

**Question number nineteen** (19):

What is the greatest common factor of forty-eight (48) and sixty-four (64)?

Choose answer A, B, C, or D.

**Question number twenty** (20):

A paint color is made using four (4) drops of red and five (5) drops of blue for each five (5) gallons of paint. How many gallons of paint are being colored when forty-five (45) drops of color are used?

Choose answer A, B, C, or D.

**Question number twenty-one** (21):

A phone company uses the equation (shown) to find y, the monthly charge for a customer sending x text messages. How many text messages are sent if the monthly charge is seventy-seven dollars and fifty cents (\$77.50)?

Choose answer A, B, C, or D.

**Question number twenty-two** (22):

A scale drawing of a kite is shown.

Clockwise from the top, the scale drawing is labeled: "six centimeters (6 cm)," "ten centimeters (10 cm)," "six centimeters (6 cm)," "six centimeters (6 cm)."

What is the area of the kite?

**Choose one of the following answers.** (Read answers aloud.)

- **A.** Twenty-eight square centimeters (28 cm<sup>2</sup>)
- **B.** Sixty square centimeters  $(60 \text{ cm}^2)$
- C. Ninety-six square centimeters (96 cm<sup>2</sup>)
- **D. One hundred ninety-two square centimeters** (192 cm<sup>2</sup>)

ITEM SAMPLER MAY BE DUPLICATED. **Question number twenty-three** (23):

A triangle is shown.

Clockwise from the top, the outside of the figure reads: "K," "L," "J." From left to right, the inside of the figure reads: "forty-five degrees (45°)," "ninety-three degrees (93°)."

What is the measure of angle L (m $\angle L$ )?

Choose one of the following answers. (Read answers aloud.)

- **A.** Forty-two degrees (42°)
- **B.** Forty-five degrees  $(45^\circ)$
- C. Forty-eight degrees (48°)
- **D. One hundred thirty-eight degrees** (138°)

**Question number twenty-four** (24):

A building has nine (9) windows. Each window is five (5) feet tall.

About how tall is the building?

Choose one of the following answers. (Read answers aloud.)

- A. Fifteen (15) feet
- **B.** Twenty-five (25) feet
- C. Forty (40) feet
- **D.** Forty-five (45) feet

**Question number twenty-five** (25):

Tyler has a stack of cards. He picks a card, records the color, and returns the card to the stack. He repeats this sixty (60) times and chooses a red card twenty-four (24) times. What is the experimental probability of choosing a red card from the stack?

Choose answer A, B, C, or D.

# STOP

This is the end of the mathematics test.

If you want to check your answers, you may do so now. You may ask me to repeat any question. You will not be able to come back to these questions later.

Pause while the student checks his or her answers.

#### After you have checked your answers, seal this segment of your test book.

Collect the test materials from the student as specified in the *Test Monitor and Student Directions* for Paper Accommodations for MCA.

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