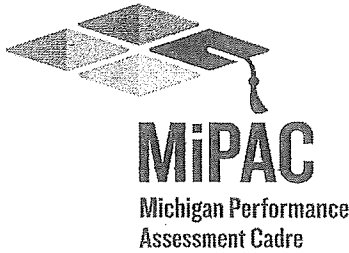


Not Meeting Expectations

Competency Assessment, Standards, and Supports for Competency-Based Education
Michigan Assessment Consortium



CBE Assessment

Performance Assessment MA.4.7 Multiplication Knowledge Grade 4

Student Booklet

Name: HARMONY GAINES-ADAMS

Teacher: MRS. ROSS

School: GRAND BLANC ACADEMY

Date: 2-28-24

ACKNOWLEDGEMENTS

The scoring rubrics shown in this booklet are adapted from those developed by the Center for Assessment, under creative commons license Attribution 4.0 International (CC BY 4.0)



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STUDENT DIRECTIONS

MULTIPLICATION KNOWLEDGE

You will take an assessment today to show me what you have learned about multiplication. This will help me determine who has mastered the concepts and who may need some additional help to master the concepts.

There are several mathematics problems for you to solve starting on page 3 and continuing through page 6. You will have the remainder of this class period to complete the assessment by answering all 10 questions on pages 3 through 6.

Do you have any questions about what you are expected to do?

You will have 40 minutes to respond to all 10 questions. You may now begin.

When time is up, please close your Student Booklets and them to your teacher.

STUDENT MATERIALS

Solve the following problems:

$\begin{array}{r} 23^{\cancel{2}} \\ 1. \ 1344 \\ \times \quad 7 \\ \hline 9,708 \end{array}$	$\begin{array}{r} 332 \\ 2. \ 5879 \\ \times \quad 4 \\ \hline 23,516 \end{array}$	$\begin{array}{r} 11 \\ 3. \ 8123 \\ \times \quad 6 \\ \hline 48,738 \end{array}$
$\begin{array}{r} 4. \ 23 \\ \times \ 11 \\ \hline + \ 23 \\ \ 230 \\ \hline 253 \end{array}$	$\begin{array}{r} 2 \\ 5. \ 86 \\ \times \ 24 \\ \hline + \ 344 \\ 1720 \\ \hline 2,064 \end{array}$	$\begin{array}{r} 12 \\ 6. \ 25 \\ \times \ 73 \\ \hline + \ 175 \\ 1750 \\ \hline 1,825 \end{array}$

7. Jonas says that "if you multiply a four-digit number by a one-digit number, you get a five-digit number."

Place numbers into the table to show when Jonas' claim is true and to show when his claim is not true. *if*

Example of when.....	4-digit number	1-digit number	Product
	<i>1x=5 digits</i>	<i>1 digit x 1 digit = 5</i>	<i>ANSWER 5 digits</i>
Jonas' claim is true	<i>1234 1 digit</i>	<i>1234 1 digit</i>	<i>1234</i>
Jonas' claim is NOT true		<i>false</i>	

8. Angela claims that "when you multiply two two-digit numbers you will only get a four-digit number as an answer." Is Angela correct? Explain. Make sure to provide an example.

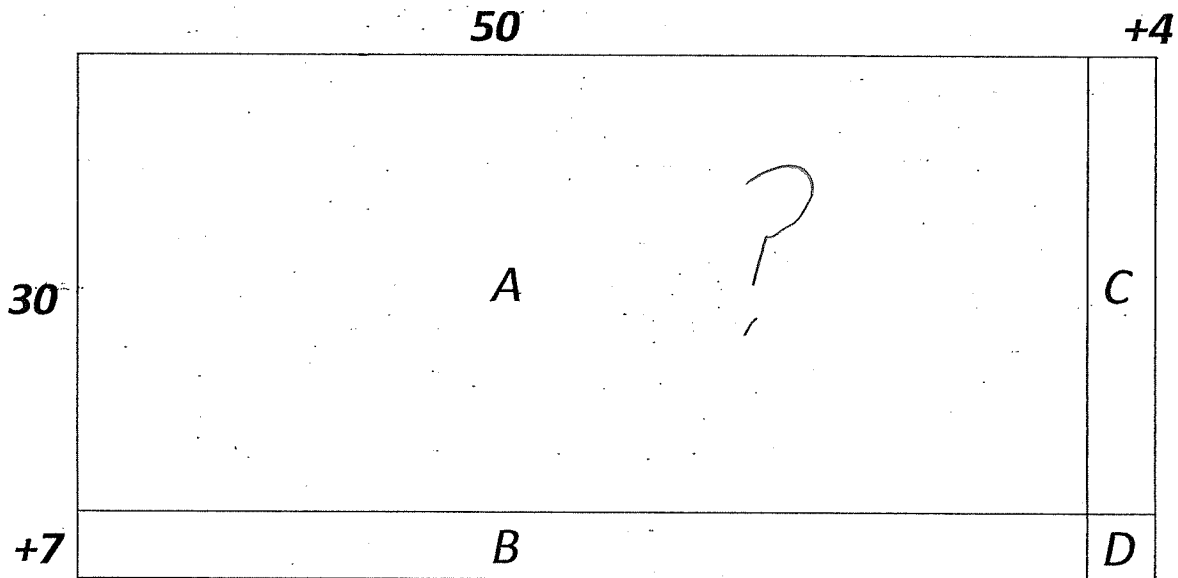
NO Angela is not correct because when you multiply two two-digit numbers you can also get a 3 digit or 5 digit number.

$$\begin{array}{r}
 11 \\
 25 \\
 \times 22 \\
 \hline
 220 \\
 + 500 \\
 \hline
 720
 \end{array}$$

450 *Not a 4 digit number*

9. Fill in the blanks: $74 \times 24 = (70 + \underline{4}) \times (\underline{20} + 4)$

10A. In the area model shown below, $D = 28$. What are the values for A, B, and C? Show how you got the answers.



A= ?

B= ?

C= ?

Total area= 1,736

$$\begin{array}{r}
 74 \\
 \times 24 \\
 \hline
 296 \\
 + 1480 \\
 \hline
 1736
 \end{array}$$

$$\begin{array}{r}
 1736
 \end{array}$$

10B. In the area model shown below, $D = 48$. What are the values for A, B, and C? Show how you got the answers.

	30	+8
10	A	C
+6	B	D

A= _____

B= _____

C= _____

Total area= _____

10C. The area models shown above in 10A and 10B are two lawns that Bobby can mow during the summer. He charges \$25 to mow a lawn. Which lawn is the better choice for him to mow for that cost? Explain.

