

## STUDENT MATERIALS

Solve the following problems:

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

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. *(f)*

Example of when.....	4-digit number	1-digit number	Product
	$1 \times = 5$ digits	1 digit $\times$ 1 digit = 5	ANSWER 5 digits
Jonas' claim is true	TRUE 1 digit	1 digit	TRUE
Jonas' claim is NOT true		FALSE	

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.

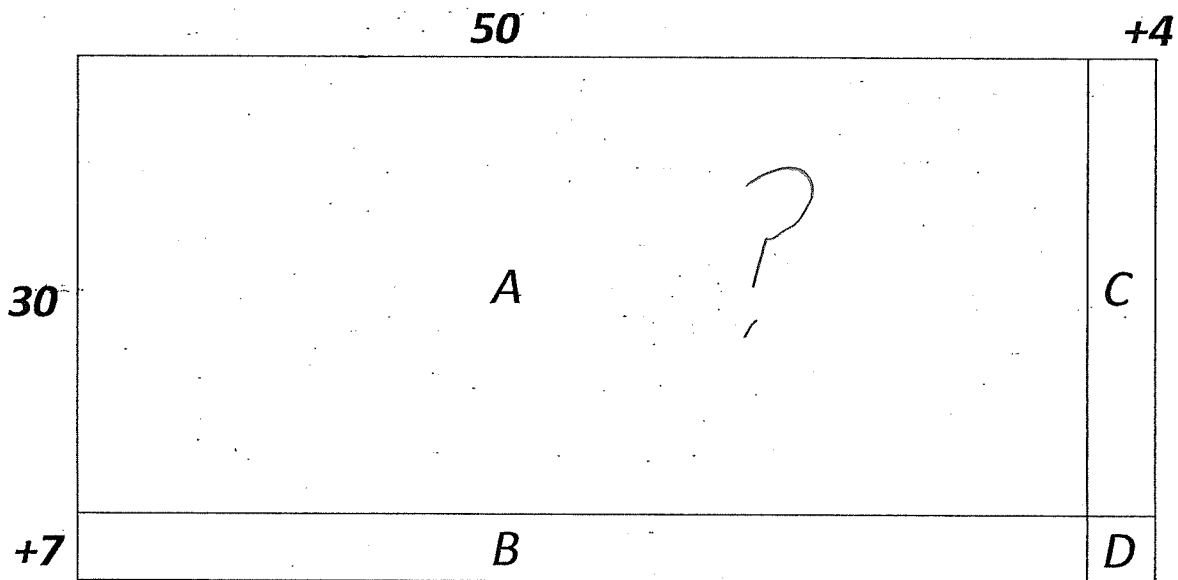
NO ANGELA IS NOT CORRECT BECAUSE WHEN YOU MULTIPLY TWO TWO-DIGIT NUMBERS YOU CAN ALSO GET A 3 DIGIT OR 5 DIGIT NUMBER.

$$\begin{array}{r}
 11 \\
 25 \\
 \times 22 \\
 \hline
 + 50 \\
 400 \\
 \hline
 450
 \end{array}$$

450 is not a 4 digit number

9. Fill in the blanks:  $74 \times 24 = (70 + \underline{4}) \times (\underline{30} + 4)$

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 =           ?

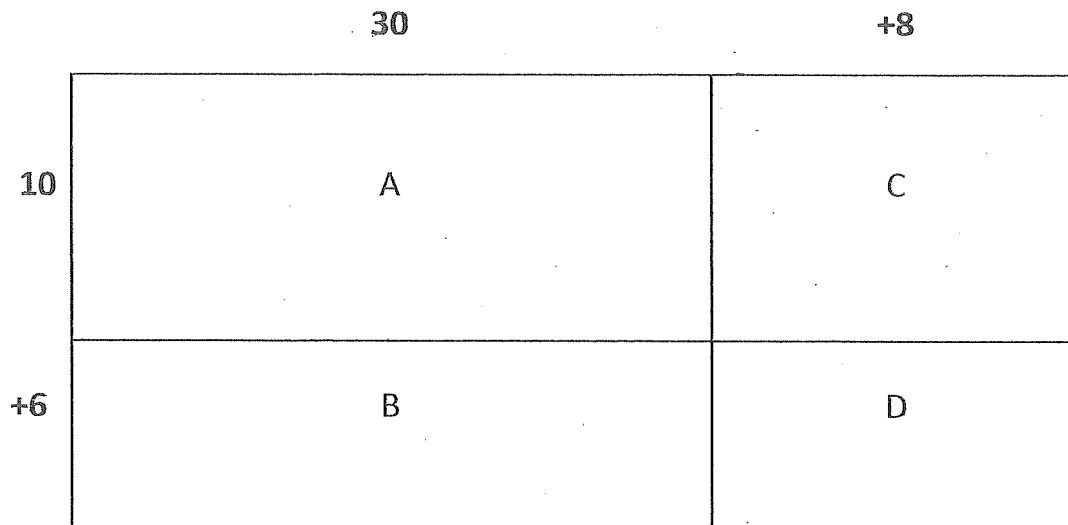
C =           ?

Total area = 1,736

$$\begin{array}{r}
 74 \\
 \times 24 \\
 \hline
 296 \\
 1440 \\
 \hline
 1736
 \end{array}$$

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

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



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.