Name _____ Date _____

Two-Digit by Two-Digit Multiplication: Area Models and Partial Products

Directions: Split each two-digit number into tens and ones. Multiply each part of one number by each part of the other, then add the products.

1. Find 20×40.

_____

2. Break 34×21 into four partial products. Type the two missing numbers.
$30 \times 20 =$ _____, $30 \times 1 = 30$, $4 \times 20 =$ _____ and $4 \times 1 = 4$. The four products add up to 714.

3. Think of 12×34 as 10 groups of 34 and 2 more groups of 34. What is 12×34?

_____

4. To multiply 26×15, Bianca draws a rectangle 26 units long and 15 units wide. She splits 26 into 20 and 6, and 15 into 10 and 5. That makes four smaller rectangles. Which list shows the areas of all four?

A. 20, 10, 6 and 5
B. 200 and 30
C. 200, 100, 60 and 30
D. 200, 100, 60 and 11

5. Cars park in 24 rows at the mall, and each row has 18 spaces. How many parking spaces is that?

_____ spaces

6. Owen multiplies 32×14 and gets 308. He used only two partial products: $30 \times 10 = 300$ and $2 \times 4 = 8$. Which two partial products did he leave out?

A. 3×1 and 2×4
B. 30×2 and 10×4
C. $30 + 10$ and $2 + 4$
D. 30×4 and 2×10

7. Multiply 45 by 32. Type only the digits of your answer, with no comma.

_____

8. Use two partial products to find 36×25. Fill in both of them.
$30 \times 25 =$ _____ and $6 \times 25 =$ _____. Together they make $36 \times 25 = 900$.

9. Each crate holds 53 peaches. A farmer fills 28 crates. How many peaches does the farmer pack? Your answer should have no comma.

_____ peaches

10. A hotel has 15 floors with 22 rooms on each floor. Painters have closed 47 of the rooms. How many rooms are still open?

_____ rooms