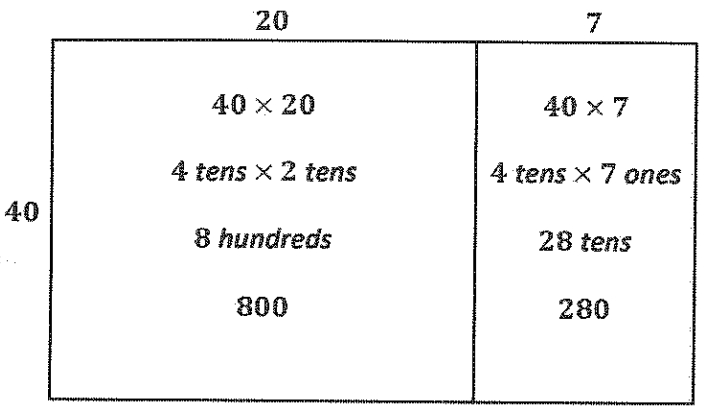
G4-M3-Lesson 35

1. Use an area model to represent the following expression. Then, record the partial products vertically and solve.

40×27

I write 40 as the width and decompose 27 as 20 and 7 for the length.



I solve for each of the smaller areas.

$$\begin{array}{r} 27 \\ \times\ 40 \\ \hline 280 \\ +\ 800 \\ \hline 1,080 \end{array}$$

I record the partial products. The partial products have the same value as the areas of the smaller rectangles.

2. Visualize the area model, and solve the following expression numerically.

30×66

$$\begin{array}{r} 66 \\ \times\ 30 \\ \hline 180 \\ +\ 1,800 \\ \hline 1,980 \end{array}$$

To solve, I visualize the area model. I see the width as 30 and the length as $60 + 6$. 3 tens × 6 ones = 18 tens. 3 tens × 6 tens = 18 hundreds. I record the partial products. I find the total. $180 + 1{,}800 = 1{,}980$.