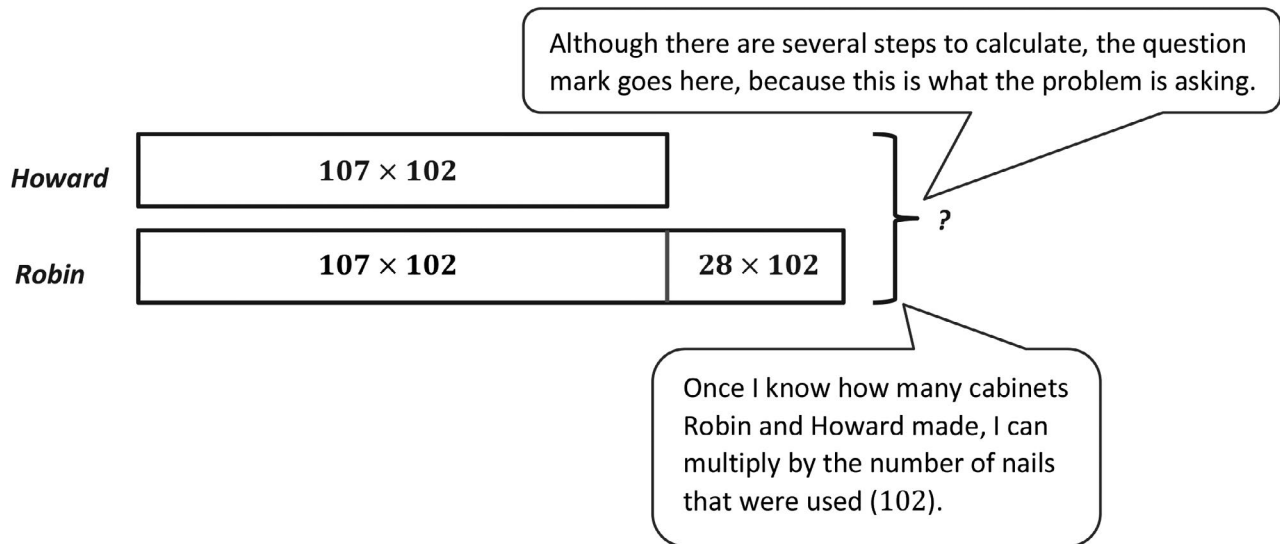


Solve.

1. Howard and Robin are both cabinet makers. Over the last year, Howard made 107 cabinets. Robin made 28 more cabinets than Howard. Each cabinet they make has exactly 102 nails in it. How many nails did they use altogether while making the cabinets?



Howard:

$$\begin{array}{r}
 107 \\
 \times 102 \\
 \hline
 214 \\
 + 10700 \\
 \hline
 10,914
 \end{array}$$

Robin: $107 + 28 = 135$

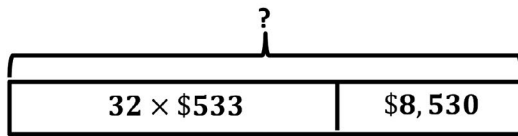
$$\begin{array}{r}
 135 \\
 \times 102 \\
 \hline
 270 \\
 + 13500 \\
 \hline
 13,770
 \end{array}$$

$$\begin{array}{r}
 10,914 \\
 + 13,770 \\
 \hline
 24,684
 \end{array}$$

9 hundreds plus 7 hundreds is equal to 16 hundreds. I'll record 1 in the thousands place and write 6 in the hundreds place.

Together they used 24,684 nails.

2. Mrs. Peterson made 32 car payments at \$533 each. She still owes \$8,530 on her car. How much did the car cost?



My strip diagram shows two parts: 32 payments at \$533 and the \$8,530 she still owes. All I have to do is find both parts and then add!

$$\begin{array}{r}
 533 \\
 \times 32 \\
 \hline
 1066 \\
 + 15990 \\
 \hline
 17,056
 \end{array}$$

$$\begin{array}{r}
 17,056 \\
 + 8,530 \\
 \hline
 25,586
 \end{array}$$

Mrs. Peterson's car cost \$25,586.

3. Bao saved \$179 a month. He saved \$145 less than Ada each month. How much would Ada save in three and a half years?

4. Mrs. Williams is knitting a blanket for her newborn granddaughter. The blanket is 2.25 meters long and 1.8 meters wide. What is the area of the blanket? Write the answer in centimeters.

5. Use the chart to solve.

Soccer Field Dimensions

	FIFA Regulation (in yards)	NFHS Regulation (in yards)
Minimum Length	110	100
Maximum Length	120	120
Minimum Width	70	55
Maximum Width	80	80

- Write an expression to find the difference in the maximum area and minimum area of a NFHS regulation soccer field. Then, evaluate your expression.
- Would a field with a width of 75 yards and an area of 7,500 square yards be within FIFA regulation? Why or why not?
- It costs \$26 to fertilize, water, mow, and maintain each square yard of a full size FIFA field (with maximum dimensions) before each game. How much will it cost to prepare the field for next week's match?

