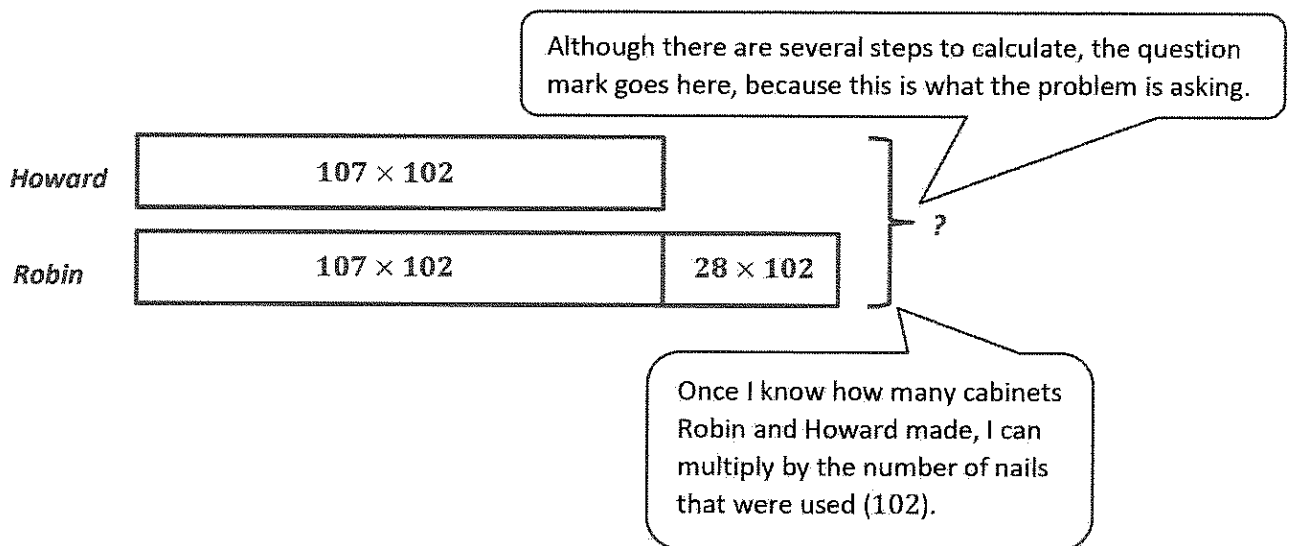## G5-M2-Lesson 9

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?

> Although there are several steps to calculate, the question mark goes here, because this is what the problem is asking.

Howard	107×102	

Robin	107×102	28×102

?

> Once I know how many cabinets Robin and Howard made, I can multiply by the number of nails that were used (102).

Howard:

$$
\begin{array}{r}
1\ 0\ 7 \\
\times\ 1\ 0\ 2 \\
\hline
2\ 1\ 4 \\
+\ 1\ 0\ 7\ 0\ 0 \\
\hline
1\ 0,9\ 1\ 4
\end{array}
$$

Robin: $107 + 28 = 135$

$$
\begin{array}{r}
1\ 3\ 5 \\
\times\ 1\ 0\ 2 \\
\hline
2\ 7\ 0 \\
+\ 1\ 3\ 5\ 0\ 0 \\
\hline
1\ 3,7\ 7\ 0
\end{array}
$$

$$
\begin{array}{r}
1\ 0,9\ 1\ 4 \\
+\ 1\ 3,7\ 7\ 0 \\
\hline
2\ 4,6\ 8\ 4
\end{array}
$$

> 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.

EUREKA MATH   Lesson 9:   Fluently multiply multi-digit whole numbers using the standard algorithm to solve multi-step word problems.   15

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