Assessment : Section B Checkpoint
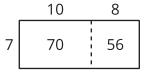
Problem 1

Goals Assessed

- Multiply a whole number of up to four digits by a one-digit whole number, and 2 two-digit numbers using strategies based on place value and the properties of operations.

Statement

Find the value of 18×7. Explain or show your reasoning.

Solution

$18 \times 7 = 126$. Sample reasoning:
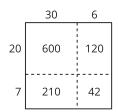

$70 + 56 = 126$

Problem 2

Goals Assessed

- Multiply a whole number of up to four digits by a one-digit whole number, and 2 two-digit numbers using strategies based on place value and the properties of operations.

Statement

Find the value of 27×36. Explain or show your reasoning.

Solution

972. Sample reasoning:

$600 + 120 + 210 + 42 = 972$

Problem 3

Goals Assessed

- Multiply a whole number of up to four digits by a one-digit whole number, and 2 two-digit numbers using strategies based on place value and the properties of operations.

Statement

Here is Noah's work finding the value of 92×78.

Do you agree with Noah's work? Explain or show your reasoning.

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

Solution

I disagree with Noah. Sample reasoning: He multiplied 2 and 90 by 7 instead of by 70. Those partial products should be 10 times as much, 140 and 6,300 instead of 14 and 630.