## Multiplication Records from Puzzles

Fill in the puzzle and complete the multiplication records.

1


| 9 |
| :---: |
| 20 |
| 29 |


| (2) $\begin{array}{r}50 \\ \times 9\end{array}$ | (3) $\begin{array}{r}3 \\ \times 20 \\ \hline\end{array}$ | (4) $\begin{array}{r}53 \\ \times \quad 29\end{array}$ |
| :---: | :---: | :---: |
| (5) $\begin{array}{r}50 \\ \times \quad 20 \\ \hline\end{array}$ | (6) $\begin{array}{r}3 \\ \times \quad 29 \\ \hline\end{array}$ | (7) $\begin{array}{r}3 \\ \times 9 \\ \hline\end{array}$ |
| (8) $\begin{array}{r}50 \\ \times \quad 29 \\ \hline\end{array}$ | (2) $\begin{array}{r}53 \\ \times \quad 20 \\ \hline\end{array}$ | (10) $\begin{array}{r}53 \\ \times 9 \\ \hline\end{array}$ |

## Steps Away Tables

| 2 Steps Away: * | $n$ | 6 | 8 | 10 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n^{2}$ |  |  |  |  |
|  | $n+2$ |  |  |  |  |
|  | $n-2$ |  |  |  |  |
| P ** | $(n+2) \times(n-2)$ |  |  |  |  |
| 3 Steps Away: * | $n$ | 6 | 8 | 10 | 12 |
|  | $n^{2}$ |  |  |  |  |
|  | $n+3$ |  |  |  |  |
|  | $n-3$ |  |  |  |  |
| Q ** | $(n+3) \times(n-3)$ |  |  |  |  |
| 4 Steps Away: * | $n$ | 6 | 8 | 10 | 12 |
|  | $n^{2}$ |  |  |  |  |
|  | $n+4$ |  |  |  |  |
|  | $n-4$ |  |  |  |  |
| Q ** | $(n+4) \times(n-4)$ |  |  |  |  |
| 5 Steps Away: $\quad$ * | $n$ | 6 | 8 | 10 | 12 |
|  | $n^{2}$ |  |  |  |  |
|  | $n+5$ |  |  |  |  |
|  | $n-5$ |  |  |  |  |
|  | $(n+5) \times(n-5)$ |  |  |  |  |

# Multiplying Three-Digit Numbers by Two-Digit Numbers 

## Here is a 3-digit by 2-digit multiplication problem.

## $176 \times 48$

(1) Think about the methods you know for multiplying 2-digit numbers. Tell or show how you would use one of those methods to solve this problem.
2) Find the same product using a different method.
(3) Give one reason that a student would want to use the first method and one reason that a student would want to use the second method.

