## Multiply Using Partial Products

1 While at the beach, Amanda takes 48 photos of

ONLINE
Video Tutorials and
Interactive Examples waves. She takes 5 times as many photos of shells. How many photos of shells does she take?

Estimate. Then use partial products to find the product.

2 Estimate:
72
$\times 4$

3 Estimate:
2,519
$\begin{array}{r}3 \\ \times \quad 3 \\ \hline\end{array}$

4 Estimate: $\qquad$
368
$\begin{array}{r} \\ \times \quad 9 \\ \hline\end{array}$

Estimate. Then rewrite the problem and use partial products to find the product.

5 Estimate:
$6 \times 76$
$\qquad$

6 Estimate:
$8 \times 435$
$\qquad$ 7 Estimate:
$4 \times 3,129$

8 Math on the Spot The sum of a 3-digit number and a 1 -digit number is 138 . The product of the numbers is 536 . If one number is between 130 and 150 , what are the numbers?

## Test Prep

9 Which are partial products for $8 \times 362$ ? Select all that apply.
(A) 3,200
(C) 480
(E) 42
(B) 2,400
(D) 240
(F) 16

10 Which is the product $4 \times 2,159$ ?
(A) 8,456
(B) 8,636
(C) 8,960
(D) 12,236

11 Kennedy uses partial products to find a product. 847
Which statement best describes her error?
(A) Kennedy writes the incorrect partial product for $3 \times 800$.
(B) Kennedy writes the incorrect partial 1,200
$\begin{array}{r}1,200 \\ +\quad 21 \\ \hline 3,621\end{array}$ product for $3 \times 7$.
(C) Kennedy writes the incorrect partial product for $3 \times 40$.
(D) Kennedy adds the partial products incorrectly.

12 What is $9 \times 92$ ? $\qquad$

## Spiral Review

13 Find the product.
14 Estimate the product.

$$
4 \times 976
$$

$6 \times 8,000=$ $\qquad$
$\qquad$

