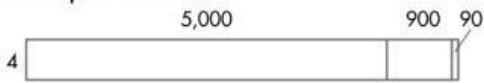


Another Look!

Find $4 \times 5,990$.

Estimate: 5,990 is close to 6,000, so the product is close to $4 \times 6,000 = 24,000$.

One way to solve is to use partial products. You can create an area model, a place-value model, or use the Distributive Property of Multiplication.



$$\begin{aligned}
 4 \times 5,990 &= 4 \times (5,000 + 900 + 90) \\
 &= (4 \times 5,000) + (4 \times 900) + \\
 &\quad (4 \times 90) \\
 &= 20,000 + 3,600 + 360 \\
 &= 23,960
 \end{aligned}$$

Another way to solve is by compensation. Find $4 \times 6,000$ and then adjust the answer by subtracting the product of 4 and 10.

$$\begin{aligned}
 5,990 &= 6,000 - 10 \\
 4 \times 6,000 &= 24,000 \\
 4 \times 10 &= 40 \\
 4 \times 5,990 &= 24,000 - 40 \\
 &= 23,960
 \end{aligned}$$

The product 23,960 is reasonable because it is close to the estimate of 24,000.

For 1–15, estimate. Then find each product by choosing an appropriate strategy.

Use your estimate to determine if your answer is reasonable.

1.
$$\begin{array}{r}
 538 \\
 \times 4 \\
 \hline
 \end{array}$$

2.
$$\begin{array}{r}
 3,721 \\
 \times 7 \\
 \hline
 \end{array}$$

3.
$$\begin{array}{r}
 92 \\
 \times 4 \\
 \hline
 \end{array}$$

4. 6×505

5. $5 \times 6,384$

6. $7 \times 3,218$

7. $5,219 \times 3$

8. $1,236 \times 8$



9. The animal shelter charges \$119 to adopt a pet. On Saturday, 2 dogs and 7 cats were adopted. How much money did the animal shelter receive from those adoptions?

10. Kamiko and her 4 sisters each have 18 grandchildren. Calculate the total number of grandchildren of Kamiko and her 4 sisters.

11. Over the weekend, 1,719 tickets were sold for a musical. How much money did the musical bring in?



In a multi-step problem, look back to be sure you answered the question asked.