

Multiplying and Dividing Whole Numbers

To multiply a whole number by a 1-digit whole number, multiply from right to left, regrouping as necessary. When you multiply by a number with two or more digits, write individual products and then add.

EXAMPLES Multiply Whole Numbers

Find each product.

1 76×8

$$\begin{array}{r} 4 \\ 76 \\ \times 8 \\ \hline 608 \end{array}$$

$8 \times 6 = 48$. Put the 8 in the ones place. Put the 4 above the tens place.

$8 \times 70 = 560$, and $560 + 40 = 600$.

2 535×24

$$\begin{array}{r} 535 \\ \times 24 \\ \hline 2,140 \\ + 10,700 \\ \hline 12,840 \end{array}$$

Multiply. $535 \times 4 = 2,140$

Multiply. $535 \times 20 = 10,700$

Add. $2,140 + 10,700 = 12,840$

When dividing whole numbers, divide in each place-value position from left to right. Recall that in the statement $50 \div 2 = 25$, 50 is the **dividend**, 2 is the **divisor**, and 25 is the **quotient**.

EXAMPLES Divide Whole Numbers

Find each quotient.

3 $342 \div 9$

$$\begin{array}{r} 38 \\ 9 \overline{)342} \\ \underline{-27} \\ 72 \\ \underline{-72} \\ 0 \end{array}$$

Divide in each place-value position from left to right.

Since $72 - 72 = 0$, there is no remainder.

4 $6,493 \div 78$

$$\begin{array}{r} 83 \text{ R}19 \\ 78 \overline{)6493} \\ \underline{-624} \\ 253 \\ \underline{-234} \\ 19 \end{array}$$

Divide in each place-value position from left to right.

Since $253 - 234 = 19$, the remainder is 19.