

Lesson 1.1 Multiplying 2 and 3 Digits by 2 DigitsMultiply right
to left.If $24 \times 3 = 72$, then
 $24 \times 30 = 720$.Multiply right
to left.

$$\begin{array}{r}
 \overset{2}{24} \\
 \times \quad 7 \\
 \hline
 168
 \end{array}
 \quad
 \begin{array}{r}
 \overset{24}{\times} \quad 37 \\
 \hline
 168 \\
 + 720 \\
 \hline
 888
 \end{array}
 \quad
 \begin{array}{r}
 \overset{1}{24} \\
 \times \quad 30 \\
 \hline
 720
 \end{array}$$

$$\begin{array}{r}
 \overset{427}{\times} \quad 1 \\
 \hline
 427
 \end{array}
 \quad
 \begin{array}{r}
 \overset{427}{\times} \quad 61 \\
 \hline
 427 \\
 + 25620 \\
 \hline
 26047
 \end{array}
 \quad
 \begin{array}{r}
 \overset{14}{427} \\
 \times \quad 60 \\
 \hline
 25620
 \end{array}$$

Multiply.

	a	b	c	d	e	f
1.	$ \begin{array}{r} 43 \\ \times 42 \\ \hline \end{array} $	$ \begin{array}{r} 75 \\ \times 12 \\ \hline \end{array} $	$ \begin{array}{r} 52 \\ \times 28 \\ \hline \end{array} $	$ \begin{array}{r} 36 \\ \times 91 \\ \hline \end{array} $	$ \begin{array}{r} 16 \\ \times 77 \\ \hline \end{array} $	$ \begin{array}{r} 21 \\ \times 13 \\ \hline \end{array} $

2.	$ \begin{array}{r} 24 \\ \times 87 \\ \hline \end{array} $	$ \begin{array}{r} 62 \\ \times 54 \\ \hline \end{array} $	$ \begin{array}{r} 96 \\ \times 32 \\ \hline \end{array} $	$ \begin{array}{r} 18 \\ \times 47 \\ \hline \end{array} $	$ \begin{array}{r} 33 \\ \times 79 \\ \hline \end{array} $	$ \begin{array}{r} 45 \\ \times 63 \\ \hline \end{array} $
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3.	$ \begin{array}{r} 26 \\ \times 53 \\ \hline \end{array} $	$ \begin{array}{r} 39 \\ \times 74 \\ \hline \end{array} $	$ \begin{array}{r} 44 \\ \times 81 \\ \hline \end{array} $	$ \begin{array}{r} 473 \\ \times 64 \\ \hline \end{array} $	$ \begin{array}{r} 856 \\ \times 22 \\ \hline \end{array} $	$ \begin{array}{r} 375 \\ \times 49 \\ \hline \end{array} $
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4.	$ \begin{array}{r} 838 \\ \times 58 \\ \hline \end{array} $	$ \begin{array}{r} 266 \\ \times 93 \\ \hline \end{array} $	$ \begin{array}{r} 372 \\ \times 46 \\ \hline \end{array} $	$ \begin{array}{r} 659 \\ \times 78 \\ \hline \end{array} $	$ \begin{array}{r} 428 \\ \times 37 \\ \hline \end{array} $	$ \begin{array}{r} 235 \\ \times 86 \\ \hline \end{array} $
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5.	$ \begin{array}{r} 907 \\ \times 33 \\ \hline \end{array} $	$ \begin{array}{r} 415 \\ \times 27 \\ \hline \end{array} $	$ \begin{array}{r} 364 \\ \times 82 \\ \hline \end{array} $	$ \begin{array}{r} 547 \\ \times 54 \\ \hline \end{array} $	$ \begin{array}{r} 739 \\ \times 62 \\ \hline \end{array} $	$ \begin{array}{r} 697 \\ \times 76 \\ \hline \end{array} $
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Lesson 1.2 Multiplying 4 Digits by 1 and 2 Digits

Multiply from right to left.

$$\begin{aligned} 2 \times 7 &= 14 + 2 = 16 \\ 3 \times 7 &= 21 + 1 = 22 \end{aligned}$$

$$\begin{array}{r} 3236 \\ \times 7 \\ \hline 22,652 \end{array}$$

$$\begin{aligned} 6 \times 7 &= 42 \\ 3 \times 7 &= 21 + 4 = 25 \end{aligned}$$

$$\begin{array}{r} 7198 \\ \times 14 \\ \hline 28792 \\ + 71980 \\ \hline 100,772 \end{array}$$

If $7,198 \times 1 = 7,198$,
then
 $7,198 \times 10 = 71,980$.

Multiply.

	a	b	c	d	e
1.	$\begin{array}{r} 2763 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 6204 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 3221 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 8634 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7253 \\ \times 6 \\ \hline \end{array}$

2.	$\begin{array}{r} 4728 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 3962 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 1854 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 5273 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 4456 \\ \times 3 \\ \hline \end{array}$
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3.	$\begin{array}{r} 7526 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 9428 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 3725 \\ \times 28 \\ \hline \end{array}$	$\begin{array}{r} 6414 \\ \times 37 \\ \hline \end{array}$	$\begin{array}{r} 2889 \\ \times 41 \\ \hline \end{array}$
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4.	$\begin{array}{r} 5297 \\ \times 64 \\ \hline \end{array}$	$\begin{array}{r} 4175 \\ \times 23 \\ \hline \end{array}$	$\begin{array}{r} 8052 \\ \times 46 \\ \hline \end{array}$	$\begin{array}{r} 2988 \\ \times 85 \\ \hline \end{array}$	$\begin{array}{r} 6364 \\ \times 92 \\ \hline \end{array}$
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5.	$\begin{array}{r} 3562 \\ \times 27 \\ \hline \end{array}$	$\begin{array}{r} 7451 \\ \times 54 \\ \hline \end{array}$	$\begin{array}{r} 1920 \\ \times 83 \\ \hline \end{array}$	$\begin{array}{r} 9163 \\ \times 72 \\ \hline \end{array}$	$\begin{array}{r} 4276 \\ \times 56 \\ \hline \end{array}$
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Lesson 1.3 Dividing 3 Digits by 2 Digits

$$71 \div 14 = 5$$

remainder 1

$$18 \div 14 = 1$$

remainder 4

$$14 \times 5 = 70 \longrightarrow$$

$$\begin{array}{r} 5 \\ 14 \overline{) 718} \\ \underline{- 70} \\ 18 \end{array}$$

The quotient is 51.
The remainder is 4.

$$\begin{array}{r} 51 \\ 14 \overline{) 718} \\ \underline{- 70} \\ 18 \\ \underline{- 14} \\ 4 \end{array}$$

$$\begin{array}{r} 51 \text{ r}4 \\ 14 \overline{) 718} \\ \underline{- 70} \\ 18 \\ \underline{- 14} \\ 4 \end{array}$$

Divide.

a**b****c****d**

1. $23 \overline{) 264}$

$32 \overline{) 571}$

$81 \overline{) 724}$

$52 \overline{) 328}$

2. $61 \overline{) 488}$

$35 \overline{) 175}$

$82 \overline{) 362}$

$47 \overline{) 719}$

3. $97 \overline{) 891}$

$26 \overline{) 423}$

$43 \overline{) 916}$

$57 \overline{) 649}$

Lesson 1.4 Dividing 4 Digits by 2 Digits

$51 \div 23 = 2$ remainder 5 $\begin{array}{r} 2 \\ 23 \overline{) 5173} \\ \underline{46} \\ 5 \end{array}$	$57 \div 23 = 2$ remainder 11 $\begin{array}{r} 22 \\ 23 \overline{) 5173} \\ \underline{-46} \\ 57 \\ \underline{-46} \\ 113 \end{array}$	$113 \div 23 = 4$ remainder 21 $\begin{array}{r} 224 \\ 23 \overline{) 5173} \\ \underline{-46} \\ 57 \\ \underline{-46} \\ 113 \end{array}$	$\begin{array}{r} 224 \text{ r}21 \\ 23 \overline{) 5173} \\ \underline{-46} \\ 57 \\ \underline{-46} \\ 113 \end{array}$
$23 \times 2 = 46$	$23 \times 2 = 46$	$23 \times 2 = 46$	$23 \times 2 = 46$
The quotient is 224. The remainder is 21.			

Divide.

a**b****c****d**

1. $43 \overline{) 6571}$

$22 \overline{) 8294}$

$62 \overline{) 3628}$

$88 \overline{) 4773}$

2. $56 \overline{) 2829}$

$89 \overline{) 4340}$

$75 \overline{) 8195}$

$29 \overline{) 4872}$

3. $63 \overline{) 1890}$

$31 \overline{) 6263}$

$96 \overline{) 5379}$

$48 \overline{) 7246}$

Lesson 1.5 Problem Solving**SHOW YOUR WORK**

Solve each problem.

1. At the Bead Shop, there are 25 rows of beads. If there are 320 beads in each row, how many beads are in the shop?

There are _____ beads in the shop.

2. The cafeteria planned to bake 3 cookies for every student in the school. If there are 715 students, how many cookies does the cafeteria need to bake?

The cafeteria needs to bake _____ cookies.

3. A group of 123 students went on a field trip to collect seashells. If the students collected 15 shells each, how many shells did they collect?

The students collected _____ shells.

4. A girls' club is trying to get into the record books for the most hair braids. There are 372 girls. If each girl braids her hair into 40 little braids, how many braids will they have?

They will have _____ braids.

5. A school bought 831 boxes of computer paper for the computer lab. Each box had 59 sheets of paper inside it. How many sheets of paper were bought in total?

The school bought _____ sheets of paper.

6. A vat of orange juice contains the juice from 231 oranges. If a company has 611 vats, how many oranges would it need to fill them all?

The company would need _____ oranges.

1.

2.

3.

4.

5.

6.

Lesson 1.5 Problem Solving**SHOW YOUR WORK**

Solve each problem.

1. The Pancake Restaurant served 384 pancakes. If 87 customers ate an equal number of pancakes, how many did each person eat?

Each person ate _____ pancakes.

2. Gary opened a bag of candy containing 126 pieces. He wants to give each of his guests the same number of pieces. If he has 42 guests, how many pieces does each person get?

Each guest gets _____ pieces.

3. At the local fair, 358 people waited in line for a boat ride. The boat can hold 8 people. How many trips will the boat have to take for everyone to get a ride?

The boat will have to take _____ trips.

4. Cafeteria workers were putting milk cartons into crates. They had 1,052 cartons and 36 cartons in each crate. How many full crates did they end up with?

They ended up with _____ full crates.

5. A machine in a candy company creates 9,328 pieces of candy each hour. If a box of candy has 98 pieces in it, how many boxes does the machine make in one hour?

The machine makes _____ boxes each hour.

6. Oliver was trying to beat his old score of 1,842 points in a video game. If he scores exactly 85 points each round, how many rounds would he need to play to beat his old score?

Oliver should play _____ rounds.

1.

2.

3.

4.

5.

6.