

## Worksheet

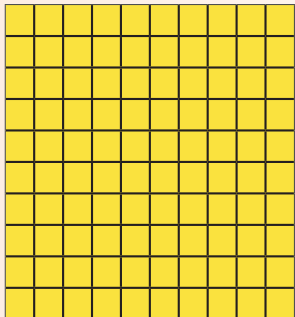
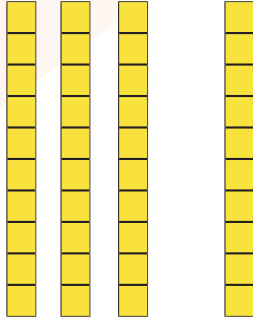
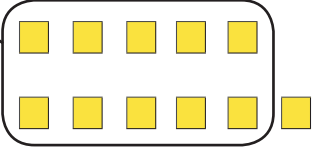
### Place-Value Computation: Addition

**Objective:** Add 2- and 3-digit numbers using blocks or representations.

**Directions:** Write the numbers that you want to add in the place-value chart to line up their place values. Then use base-10 blocks or draw pictures to represent the blocks and solve the addition problems.

1.

$$\begin{array}{r} 125 \\ + 16 \\ \hline 141 \end{array}$$

| Hundreds  | Tens  | Ones   |
|---|---|--|
| <b>1</b>  | <b>2</b>  | <b>5</b>   |
|   | <b>1</b>  | <b>6</b>   |
|  |  |  |
| <b>1</b>  | <b>4</b>  | <b>1</b>   |

2.

$$\begin{array}{r} 142 \\ + 27 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |

3.

$$\begin{array}{r} 236 \\ + 126 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |

4.

$$\begin{array}{r} 318 \\ + 49 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |

5.

$$\begin{array}{r} 169 \\ + 224 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |



6.

$$\begin{array}{r} 163 \\ + 172 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |

7.

$$\begin{array}{r} 268 \\ + 313 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |



8.

$$\begin{array}{r} 411 \\ + 196 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |

9.

$$\begin{array}{r} 267 \\ + 258 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |



10.

$$\begin{array}{r} 345 \\ + 179 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
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|          |      |      |

## Worksheet

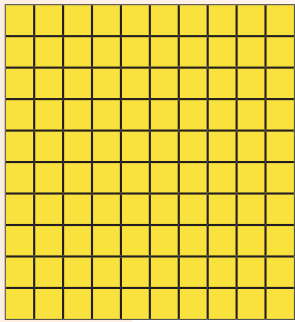
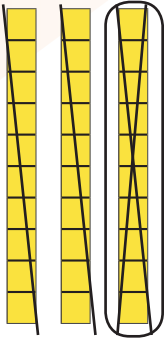
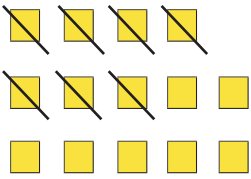
### Place-Value Computation: Subtraction

**Objective:** Subtract 2 and 3 digit numbers using blocks or representations.

**Directions:** Write the numbers that you want to subtract in the place value chart to line up their place values. Then use base-10 blocks or draw pictures to represent the blocks and solve the subtraction problems. Cross out drawings or remove blocks as you subtract.

1.

$$\begin{array}{r} 134 \\ - 27 \\ \hline 107 \end{array}$$

| Hundreds  | Tens  | Ones  |
|---|---|---|
| <b>1</b>  | <b>3</b>  | <b>4</b>  |
|   | <b>2</b>  | <b>7</b>  |
|  |  |  |
| <b>1</b>  | <b>0</b>  | <b>7</b>  |

2.

$$\begin{array}{r} 155 \\ - 48 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |

3.

$$\begin{array}{r} 276 \\ - 37 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |



4.

$$\begin{array}{r} 161 \\ - 43 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |

5.

$$\begin{array}{r} 237 \\ - 158 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |



6.

$$\begin{array}{r} 394 \\ - 43 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |

7.

$$\begin{array}{r} 312 \\ - 168 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |



8.

$$\begin{array}{r} 171 \\ - 99 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |

9.

$$\begin{array}{r} 224 \\ - 56 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
|          |      |      |
|          |      |      |
|          |      |      |



10.

$$\begin{array}{r} 538 \\ - 348 \\ \hline \end{array}$$

| Hundreds | Tens | Ones |
|----------|------|------|
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|          |      |      |
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## Worksheet

### Place-Value Computation: Multiplication

**Objective:** Multiply 2- and 3-digit numbers by 1-digit numbers, using manipulatives to represent the problem.

**Directions:**

1. Read the problem as “\_\_\_ groups of \_\_\_.”
2. Use paper plates for each group, then use base-10 blocks to show how many are in each group.
3. Combine all base-10 blocks in a place-value chart to find the product.

**Example:**

|  |  |
|--|--|
| $\begin{array}{r} 143 \\ \times 3 \\ \hline 429 \end{array}$ | $\underline{\quad 3 \quad} \text{ groups of } \underline{\quad 143 \quad}$ |
|--|--|

Note: See Supplemental Materials for an example of how this can be solved using base-10 blocks.

1.

|  |  |
|--|--|
| $\begin{array}{r} 215 \\ \times 2 \\ \hline \end{array}$ | $\underline{\quad \quad \quad} \text{ groups of } \underline{\quad \quad \quad}$ |
|--|--|

2.

|  |  |
|--|--|
| $\begin{array}{r} 331 \\ \times 2 \\ \hline \end{array}$ | $\underline{\quad \quad \quad} \text{ groups of } \underline{\quad \quad \quad}$ |
|--|--|

3.

$$\begin{array}{r} 146 \\ \times 3 \\ \hline \end{array}$$

\_\_\_\_\_ groups of \_\_\_\_\_

4.

$$\begin{array}{r} 207 \\ \times 3 \\ \hline \end{array}$$

\_\_\_\_\_ groups of \_\_\_\_\_

5.

$$\begin{array}{r} 310 \\ \times 3 \\ \hline \end{array}$$

\_\_\_\_\_ groups of \_\_\_\_\_

6.

$$\begin{array}{r} 453 \\ \times 2 \\ \hline \end{array}$$

\_\_\_\_\_ groups of \_\_\_\_\_

7.

$$\begin{array}{r} 123 \\ \times 4 \\ \hline \end{array}$$

\_\_\_\_\_ groups of \_\_\_\_\_

8.

$$\begin{array}{r} 384 \\ \times 2 \\ \hline \end{array}$$

\_\_\_\_\_ groups of \_\_\_\_\_

9.

$$\begin{array}{r} 147 \\ \times 2 \\ \hline \end{array}$$

\_\_\_\_\_ groups of \_\_\_\_\_

10.

$$\begin{array}{r} 258 \\ \times 3 \\ \hline \end{array}$$

\_\_\_\_\_ groups of \_\_\_\_\_

## Worksheet

### Place-Value Computation: Division

**Objective:** Divide 3-digit numbers by 1-digit numbers, using manipulatives to represent the problem.

**Directions:**

1. Write the problem in the grid with the dividend inside the box and the divisor outside.
2. Represent the dividend with base 10 blocks in the place-value chart.
3. Divide the dividend up into groups (divisor) on paper plates.
4. Regroup and exchange blocks when they cannot be divided evenly.
5. Write the number of hundreds, tens, and ones that are in each group in the appropriate place on the grid.

**Example:**

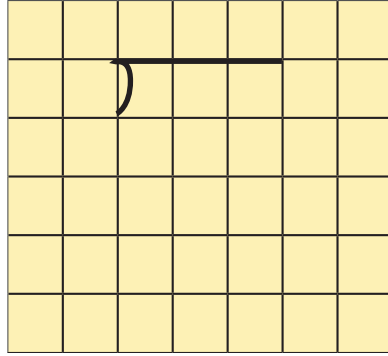
$429 \div 3 =$

|  |   |   |   |   |  |  |
|--|---|---|---|---|--|--|
|  |   | 1 | 4 | 3 |  |  |
|  | 3 | 4 | 2 | 9 |  |  |
|  |   |   |   |   |  |  |
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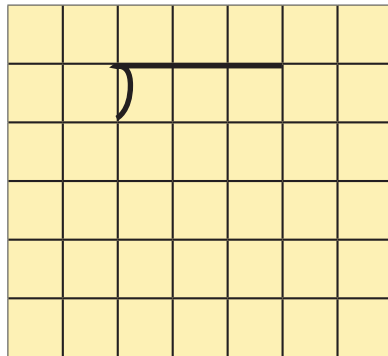
Note: See Supplemental Materials for an example of how this can be solved using base-10 blocks.



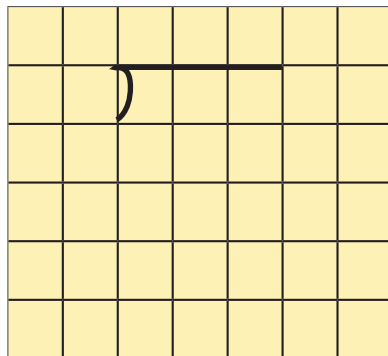
1.  $248 \div 2 =$



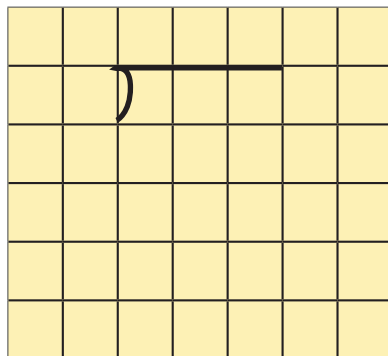
2.  $356 \div 2 =$



3.  $192 \div 3 =$



4.  $410 \div 2 =$



5.  $516 \div 3 =$

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6.  $411 \div 3 =$

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7.  $428 \div 4 =$

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8.  $235 \div 5 =$

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9.  $519 \div 3 =$

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10.  $268 \div 4 =$

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