

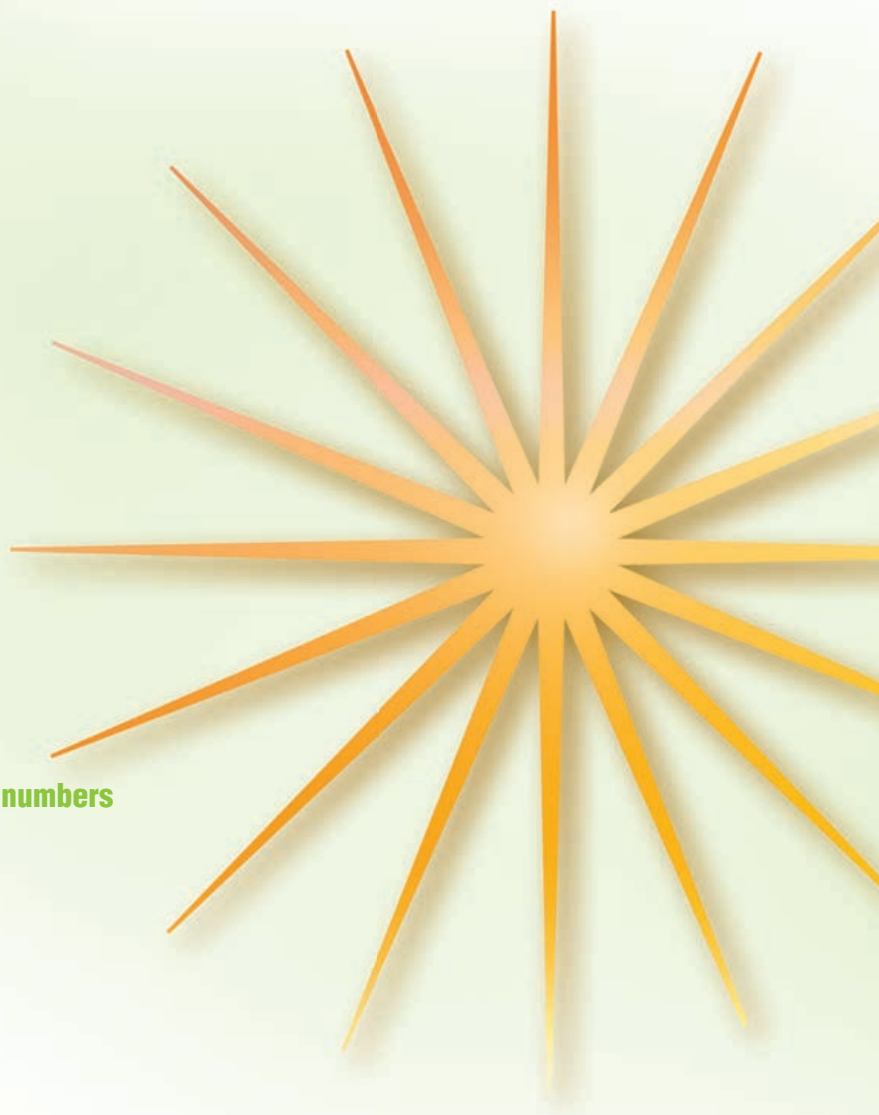
# SPECTRUM<sup>®</sup> Math

GRADE  
**3**



## Focused Practice for Math Mastery

- Adding and subtracting to four-digit numbers
- Multiplying and dividing
- Fractions
- Perimeter and area
- Graphs and line plots
- Answer key



**Check What You Know****Adding and Subtracting 1- and 2-Digit Numbers  
(with renaming)**

Add.

$$\begin{array}{r} \mathbf{1.} \quad \mathbf{a} \\ 23 \\ +19 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{b} \\ 17 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{c} \\ 37 \\ +42 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{d} \\ 11 \\ +75 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{e} \\ 81 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{2.} \\ 16 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 83 \\ +11 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ +14 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \\ +59 \\ \hline \end{array}$$

$$\begin{array}{r} 64 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{3.} \\ 30 \\ +23 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +25 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +36 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ +25 \\ \hline \end{array}$$

$$\begin{array}{r} 93 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{4.} \\ 13 \\ +86 \\ \hline \end{array}$$

$$\begin{array}{r} 75 \\ 3 \\ +16 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ 33 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \\ 51 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ 27 \\ +46 \\ \hline \end{array}$$

Subtract.

$$\begin{array}{r} \mathbf{5.} \quad \mathbf{a} \\ 90 \\ -10 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{b} \\ 16 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{c} \\ 23 \\ -18 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{d} \\ 27 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{e} \\ 19 \\ -11 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{6.} \\ 57 \\ -16 \\ \hline \end{array}$$

$$\begin{array}{r} 84 \\ -23 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ -11 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ -19 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{7.} \\ 97 \\ -58 \\ \hline \end{array}$$

$$\begin{array}{r} 46 \\ -23 \\ \hline \end{array}$$

$$\begin{array}{r} 81 \\ -27 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \\ -13 \\ \hline \end{array}$$

$$\begin{array}{r} 74 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} \mathbf{8.} \\ 32 \\ -24 \\ \hline \end{array}$$

$$\begin{array}{r} 73 \\ -12 \\ \hline \end{array}$$

$$\begin{array}{r} 65 \\ -30 \\ \hline \end{array}$$

$$\begin{array}{r} 70 \\ -20 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ - 8 \\ \hline \end{array}$$

**Check What You Know****SHOW YOUR WORK****Adding and Subtracting 1- and 2-Digit Numbers (with renaming)**

Solve each problem.

- 9.** The florist has 63 roses and carnations. If she has 27 roses, how many carnations does she have?

The florist has \_\_\_\_\_ roses and carnations.

She has \_\_\_\_\_ roses.

The florist has \_\_\_\_\_ carnations.

- 10.** Bly has 43 pennies, 13 dimes, and 16 nickels. How many coins does she have in all?

Bly has \_\_\_\_\_ pennies.

She has \_\_\_\_\_ dimes.

She has \_\_\_\_\_ nickels.

Bly has \_\_\_\_\_ coins in all.

- 11.** There are 36 students in Cleveland's class this year. If 22 are girls, how many boys are in Cleveland's class?

There are \_\_\_\_\_ students in Cleveland's class.

There are \_\_\_\_\_ girls in his class.

There are \_\_\_\_\_ boys in his class.

- 12.** The store has 53 cases of apples and oranges in the storeroom. If there are 28 cases of apples, how many cases of oranges are there in the storeroom?

There are \_\_\_\_\_ cases of oranges in the storeroom.

**9.****10.****11.****12.**

# Lesson 1.1 Adding through 20

addend      3      → Find the **3**-row.  
 addend    +    8      → Find the **8**-column.  
 sum            11   ← The sum is named  
                       where the 3-row and  
                       the 8-column meet.

		8-column Addend										
		+	0	1	2	3	4	5	6	7	8	9
Addend	0	0	1	2	3	4	5	6	7	8	9	
	1	1	2	3	4	5	6	7	8	9	10	
	2	2	3	4	5	6	7	8	9	10	11	
	3	3	4	5	6	7	8	9	10	11	12	
	4	4	5	6	7	8	9	10	11	12	13	
	5	5	6	7	8	9	10	11	12	13	14	
	6	6	7	8	9	10	11	12	13	14	15	
	7	7	8	9	10	11	12	13	14	15	16	
	8	8	9	10	11	12	13	14	15	16	17	
	9	9	10	11	12	13	14	15	16	17	18	

Add.

- |           | <b>a</b>   | <b>b</b>   | <b>c</b>   | <b>d</b>   | <b>e</b>   | <b>f</b>   |
|-----------|--|--|--|--|--|--|
| <b>1.</b> | $\begin{array}{r} 2 \\ +3 \\ \hline 5 \end{array}$ | $\begin{array}{r} 7 \\ +9 \\ \hline \end{array}$   | $\begin{array}{r} 2 \\ +5 \\ \hline \end{array}$   | $\begin{array}{r} 1 \\ +7 \\ \hline \end{array}$ | $\begin{array}{r} 0 \\ +3 \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ +5 \\ \hline \end{array}$ |
| <b>2.</b> | $\begin{array}{r} 7 \\ +2 \\ \hline \end{array}$   | $\begin{array}{r} 3 \\ +3 \\ \hline \end{array}$   | $\begin{array}{r} 9 \\ +0 \\ \hline \end{array}$   | $\begin{array}{r} 6 \\ +5 \\ \hline \end{array}$ | $\begin{array}{r} 0 \\ +7 \\ \hline \end{array}$ | $\begin{array}{r} 8 \\ +5 \\ \hline \end{array}$ |
| <b>3.</b> | $\begin{array}{r} 4 \\ +3 \\ \hline \end{array}$   | $\begin{array}{r} 2 \\ +9 \\ \hline \end{array}$   | $\begin{array}{r} 7 \\ +7 \\ \hline \end{array}$   | $\begin{array}{r} 5 \\ +6 \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ +9 \\ \hline \end{array}$ | $\begin{array}{r} 0 \\ +6 \\ \hline \end{array}$ |
| <b>4.</b> | $\begin{array}{r} 0 \\ +0 \\ \hline \end{array}$   | $\begin{array}{r} 8 \\ +3 \\ \hline \end{array}$   | $\begin{array}{r} 8 \\ +6 \\ \hline \end{array}$   | $\begin{array}{r} 6 \\ +1 \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ +3 \\ \hline \end{array}$ | $\begin{array}{r} 4 \\ +8 \\ \hline \end{array}$ |
| <b>5.</b> | $\begin{array}{r} 5 \\ +2 \\ \hline \end{array}$   | $\begin{array}{r} 3 \\ +1 \\ \hline \end{array}$   | $\begin{array}{r} 2 \\ +4 \\ \hline \end{array}$   | $\begin{array}{r} 8 \\ +2 \\ \hline \end{array}$ | $\begin{array}{r} 8 \\ +8 \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ +6 \\ \hline \end{array}$ |
| <b>6.</b> | $\begin{array}{r} 10 \\ +10 \\ \hline \end{array}$ | $\begin{array}{r} 15 \\ + 0 \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ + 7 \\ \hline \end{array}$ | $\begin{array}{r} 6 \\ +9 \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ +9 \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ +7 \\ \hline \end{array}$ |

# Lesson 1.2 Subtracting through 20

**7-column**

minuend     12  $\longrightarrow$  Find the **12** in  
 subtrahend  $- 7$   $\longrightarrow$  the **7-column**.  
 difference     5  $\longleftarrow$  The difference is the  
   number at the end  
   of the row.

-	0	1	2	3	4	5	6	7	8	9
0	0	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9	10
2	2	3	4	5	6	7	8	9	10	11
3	3	4	5	6	7	8	9	10	11	12
4	4	5	6	7	8	9	10	11	12	13
5	5	6	7	8	9	10	11	12	13	14
6	6	7	8	9	10	11	12	13	14	15
7	7	8	9	10	11	12	13	14	15	16
8	8	9	10	11	12	13	14	15	16	17
9	9	10	11	12	13	14	15	16	17	18

Subtract.

- |           | <b>a</b>   | <b>b</b>  | <b>c</b>  | <b>d</b>  | <b>e</b>  | <b>f</b>  |
|-----------|--|---|---|---|---|---|
| <b>1.</b> | $\begin{array}{r} 7 \\ -2 \\ \hline 5 \end{array}$ | $\begin{array}{r} 6 \\ -0 \\ \hline \end{array}$  | $\begin{array}{r} 5 \\ -4 \\ \hline \end{array}$  | $\begin{array}{r} 11 \\ -6 \\ \hline \end{array}$ | $\begin{array}{r} 16 \\ -9 \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ -8 \\ \hline \end{array}$ |
| <b>2.</b> | $\begin{array}{r} 6 \\ -3 \\ \hline \end{array}$   | $\begin{array}{r} 9 \\ -6 \\ \hline \end{array}$  | $\begin{array}{r} 5 \\ -2 \\ \hline \end{array}$  | $\begin{array}{r} 8 \\ -0 \\ \hline \end{array}$  | $\begin{array}{r} 18 \\ -9 \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ -7 \\ \hline \end{array}$  |
| <b>3.</b> | $\begin{array}{r} 7 \\ -2 \\ \hline \end{array}$   | $\begin{array}{r} 3 \\ -0 \\ \hline \end{array}$  | $\begin{array}{r} 8 \\ -2 \\ \hline \end{array}$  | $\begin{array}{r} 7 \\ -4 \\ \hline \end{array}$  | $\begin{array}{r} 10 \\ -3 \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ -2 \\ \hline \end{array}$  |
| <b>4.</b> | $\begin{array}{r} 14 \\ -3 \\ \hline \end{array}$  | $\begin{array}{r} 3 \\ -2 \\ \hline \end{array}$  | $\begin{array}{r} 19 \\ -3 \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ -5 \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ -8 \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ -4 \\ \hline \end{array}$ |
| <b>5.</b> | $\begin{array}{r} 12 \\ -5 \\ \hline \end{array}$  | $\begin{array}{r} 6 \\ -4 \\ \hline \end{array}$  | $\begin{array}{r} 1 \\ -0 \\ \hline \end{array}$  | $\begin{array}{r} 12 \\ -3 \\ \hline \end{array}$ | $\begin{array}{r} 10 \\ -6 \\ \hline \end{array}$ | $\begin{array}{r} 11 \\ -5 \\ \hline \end{array}$ |
| <b>6.</b> | $\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$   | $\begin{array}{r} 20 \\ -3 \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$  | $\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$  | $\begin{array}{r} 8 \\ -7 \\ \hline \end{array}$  | $\begin{array}{r} 14 \\ -8 \\ \hline \end{array}$ |

## Lesson 1.3 Adding 2-Digit Numbers (no renaming)

First, add the ones. Then, add the tens.

$$\begin{array}{r} 43 \\ +22 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ +22 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 43 \\ +22 \\ \hline 65 \end{array}$$

addend  
addend  
sum

$$\begin{array}{r} 22 \\ +16 \\ \hline 38 \end{array}$$

addend  
addend  
sum

First, add the ones.  
Then, add the tens.

Add.

	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>
<b>1.</b>	$\begin{array}{r} 23 \\ +16 \\ \hline 39 \end{array}$	$\begin{array}{r} 11 \\ +22 \\ \hline \end{array}$	$\begin{array}{r} 20 \\ +10 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ +12 \\ \hline \end{array}$	$\begin{array}{r} 73 \\ +15 \\ \hline \end{array}$	$\begin{array}{r} 63 \\ +13 \\ \hline \end{array}$

<b>2.</b>	$\begin{array}{r} 10 \\ +17 \\ \hline \end{array}$	$\begin{array}{r} 18 \\ +30 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ +14 \\ \hline \end{array}$	$\begin{array}{r} 32 \\ +51 \\ \hline \end{array}$	$\begin{array}{r} 81 \\ +11 \\ \hline \end{array}$	$\begin{array}{r} 34 \\ +21 \\ \hline \end{array}$
-----------	--	--	--	--	--	--

<b>3.</b>	$\begin{array}{r} 14 \\ +12 \\ \hline \end{array}$	$\begin{array}{r} 34 \\ +13 \\ \hline \end{array}$	$\begin{array}{r} 41 \\ +18 \\ \hline \end{array}$	$\begin{array}{r} 30 \\ +50 \\ \hline \end{array}$	$\begin{array}{r} 27 \\ +50 \\ \hline \end{array}$	$\begin{array}{r} 22 \\ +22 \\ \hline \end{array}$
-----------	--	--	--	--	--	--

<b>4.</b>	$\begin{array}{r} 18 \\ +41 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ +42 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ +44 \\ \hline \end{array}$	$\begin{array}{r} 31 \\ +17 \\ \hline \end{array}$	$\begin{array}{r} 27 \\ +42 \\ \hline \end{array}$	$\begin{array}{r} 31 \\ +38 \\ \hline \end{array}$
-----------	--	--	--	--	--	--

<b>5.</b>	$\begin{array}{r} 13 \\ +14 \\ \hline \end{array}$	$\begin{array}{r} 15 \\ +43 \\ \hline \end{array}$	$\begin{array}{r} 23 \\ +42 \\ \hline \end{array}$	$\begin{array}{r} 22 \\ +71 \\ \hline \end{array}$	$\begin{array}{r} 37 \\ +60 \\ \hline \end{array}$	$\begin{array}{r} 35 \\ +23 \\ \hline \end{array}$
-----------	--	--	--	--	--	--

<b>6.</b>	$\begin{array}{r} 10 \\ +43 \\ \hline \end{array}$	$\begin{array}{r} 73 \\ +20 \\ \hline \end{array}$	$\begin{array}{r} 86 \\ +13 \\ \hline \end{array}$	$\begin{array}{r} 52 \\ +13 \\ \hline \end{array}$	$\begin{array}{r} 42 \\ +26 \\ \hline \end{array}$	$\begin{array}{r} 32 \\ +45 \\ \hline \end{array}$
-----------	--	--	--	--	--	--

# Lesson 1.4 Subtracting 2-Digit Numbers (no renaming)

First, subtract the ones.

$$\begin{array}{r} 36 \\ -23 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \\ -23 \\ \hline 3 \end{array}$$

Then, subtract the tens.

$$\begin{array}{r} 36 \\ -23 \\ \hline 13 \end{array}$$

minuend  
subtrahend  
difference

Subtract.

	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>
<b>1.</b>	$\begin{array}{r} 23 \\ -12 \\ \hline \end{array}$	$\begin{array}{r} 86 \\ -22 \\ \hline \end{array}$	$\begin{array}{r} 93 \\ -71 \\ \hline \end{array}$	$\begin{array}{r} 30 \\ -10 \\ \hline \end{array}$	$\begin{array}{r} 92 \\ -11 \\ \hline \end{array}$	$\begin{array}{r} 48 \\ -16 \\ \hline \end{array}$

<b>2.</b>	$\begin{array}{r} 62 \\ -10 \\ \hline \end{array}$	$\begin{array}{r} 83 \\ -13 \\ \hline \end{array}$	$\begin{array}{r} 65 \\ -44 \\ \hline \end{array}$	$\begin{array}{r} 54 \\ -12 \\ \hline \end{array}$	$\begin{array}{r} 37 \\ -25 \\ \hline \end{array}$	$\begin{array}{r} 88 \\ -32 \\ \hline \end{array}$
-----------	--	--	--	--	--	--

<b>3.</b>	$\begin{array}{r} 86 \\ -45 \\ \hline \end{array}$	$\begin{array}{r} 92 \\ -70 \\ \hline \end{array}$	$\begin{array}{r} 89 \\ -62 \\ \hline \end{array}$	$\begin{array}{r} 75 \\ -62 \\ \hline \end{array}$	$\begin{array}{r} 88 \\ -44 \\ \hline \end{array}$	$\begin{array}{r} 90 \\ -60 \\ \hline \end{array}$
-----------	--	--	--	--	--	--

<b>4.</b>	$\begin{array}{r} 82 \\ -41 \\ \hline \end{array}$	$\begin{array}{r} 57 \\ -36 \\ \hline \end{array}$	$\begin{array}{r} 35 \\ -23 \\ \hline \end{array}$	$\begin{array}{r} 65 \\ -43 \\ \hline \end{array}$	$\begin{array}{r} 81 \\ -60 \\ \hline \end{array}$	$\begin{array}{r} 42 \\ -30 \\ \hline \end{array}$
-----------	--	--	--	--	--	--

<b>5.</b>	$\begin{array}{r} 60 \\ -30 \\ \hline \end{array}$	$\begin{array}{r} 46 \\ -25 \\ \hline \end{array}$	$\begin{array}{r} 92 \\ -81 \\ \hline \end{array}$	$\begin{array}{r} 86 \\ -32 \\ \hline \end{array}$	$\begin{array}{r} 57 \\ -36 \\ \hline \end{array}$	$\begin{array}{r} 29 \\ -13 \\ \hline \end{array}$
-----------	--	--	--	--	--	--

<b>6.</b>	$\begin{array}{r} 25 \\ -15 \\ \hline \end{array}$	$\begin{array}{r} 28 \\ -12 \\ \hline \end{array}$	$\begin{array}{r} 36 \\ -13 \\ \hline \end{array}$	$\begin{array}{r} 46 \\ -15 \\ \hline \end{array}$	$\begin{array}{r} 75 \\ -14 \\ \hline \end{array}$	$\begin{array}{r} 64 \\ -23 \\ \hline \end{array}$
-----------	--	--	--	--	--	--

# Lesson 1.5 Adding 2-Digit Numbers (with renaming)

Add the ones.  
Rename 12 as 10 + 2.

Add the tens.

$$\begin{array}{r} 37 \\ +25 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 5 \\ \hline 12 \text{ or } 10 + 2 \end{array}$$

$$\begin{array}{r} 37 \\ +25 \\ \hline 2 \end{array}$$

$$\begin{array}{r} 37 \\ +25 \\ \hline 62 \end{array}$$

addend  
addend  
sum

Add.

- |           | <b>a</b>  | <b>b</b>   | <b>c</b>   | <b>d</b>   | <b>e</b>   | <b>f</b>   |
|-----------|---|--|--|--|--|--|
| <b>1.</b> | $\begin{array}{r} 23 \\ +18 \\ \hline 41 \end{array}$ | $\begin{array}{r} 76 \\ +15 \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ +77 \\ \hline \end{array}$ | $\begin{array}{r} 36 \\ +16 \\ \hline \end{array}$ | $\begin{array}{r} 19 \\ +62 \\ \hline \end{array}$ | $\begin{array}{r} 29 \\ +19 \\ \hline \end{array}$ |
| <b>2.</b> | $\begin{array}{r} 27 \\ +36 \\ \hline \end{array}$    | $\begin{array}{r} 52 \\ +39 \\ \hline \end{array}$ | $\begin{array}{r} 36 \\ +28 \\ \hline \end{array}$ | $\begin{array}{r} 30 \\ +50 \\ \hline \end{array}$ | $\begin{array}{r} 56 \\ +27 \\ \hline \end{array}$ | $\begin{array}{r} 59 \\ +13 \\ \hline \end{array}$ |
| <b>3.</b> | $\begin{array}{r} 54 \\ +27 \\ \hline \end{array}$    | $\begin{array}{r} 53 \\ +28 \\ \hline \end{array}$ | $\begin{array}{r} 28 \\ +17 \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ +19 \\ \hline \end{array}$ | $\begin{array}{r} 39 \\ +17 \\ \hline \end{array}$ | $\begin{array}{r} 56 \\ +14 \\ \hline \end{array}$ |
| <b>4.</b> | $\begin{array}{r} 62 \\ +19 \\ \hline \end{array}$    | $\begin{array}{r} 27 \\ +18 \\ \hline \end{array}$ | $\begin{array}{r} 26 \\ +55 \\ \hline \end{array}$ | $\begin{array}{r} 18 \\ +13 \\ \hline \end{array}$ | $\begin{array}{r} 72 \\ +18 \\ \hline \end{array}$ | $\begin{array}{r} 37 \\ +17 \\ \hline \end{array}$ |
| <b>5.</b> | $\begin{array}{r} 23 \\ +57 \\ \hline \end{array}$    | $\begin{array}{r} 29 \\ +16 \\ \hline \end{array}$ | $\begin{array}{r} 25 \\ +16 \\ \hline \end{array}$ | $\begin{array}{r} 38 \\ +14 \\ \hline \end{array}$ | $\begin{array}{r} 26 \\ +28 \\ \hline \end{array}$ | $\begin{array}{r} 76 \\ +15 \\ \hline \end{array}$ |
| <b>6.</b> | $\begin{array}{r} 29 \\ +17 \\ \hline \end{array}$    | $\begin{array}{r} 34 \\ +27 \\ \hline \end{array}$ | $\begin{array}{r} 43 \\ +27 \\ \hline \end{array}$ | $\begin{array}{r} 25 \\ +26 \\ \hline \end{array}$ | $\begin{array}{r} 48 \\ +12 \\ \hline \end{array}$ | $\begin{array}{r} 45 \\ +46 \\ \hline \end{array}$ |



# Lesson 1.6 Subtracting 2-Digit Numbers (with renaming)

Subtract the ones.  
Rename 52 as "4 tens and 12 ones."

$$\begin{array}{r} 52 \\ -19 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \text{ } 12 \\ \cancel{5} \cancel{2} \\ -19 \\ \hline \end{array}$$

Subtract the ones.

$$\begin{array}{r} 4 \text{ } 12 \\ \cancel{5} \cancel{2} \\ -19 \\ \hline 3 \end{array}$$

Subtract the tens.

$$\begin{array}{r} 4 \text{ } 12 \\ \cancel{5} \cancel{2} \\ -19 \\ \hline 33 \end{array}$$

minuend  
subtrahend  
difference

Subtract.

	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>
<b>1.</b>	$\begin{array}{r} 30 \\ -22 \\ \hline 8 \end{array}$	$\begin{array}{r} 22 \\ -19 \\ \hline \end{array}$	$\begin{array}{r} 53 \\ -28 \\ \hline \end{array}$	$\begin{array}{r} 41 \\ -27 \\ \hline \end{array}$	$\begin{array}{r} 92 \\ -56 \\ \hline \end{array}$	$\begin{array}{r} 86 \\ -27 \\ \hline \end{array}$
<b>2.</b>	$\begin{array}{r} 83 \\ -66 \\ \hline \end{array}$	$\begin{array}{r} 62 \\ -56 \\ \hline \end{array}$	$\begin{array}{r} 51 \\ -17 \\ \hline \end{array}$	$\begin{array}{r} 34 \\ -15 \\ \hline \end{array}$	$\begin{array}{r} 46 \\ -29 \\ \hline \end{array}$	$\begin{array}{r} 57 \\ -38 \\ \hline \end{array}$
<b>3.</b>	$\begin{array}{r} 72 \\ -37 \\ \hline \end{array}$	$\begin{array}{r} 82 \\ -67 \\ \hline \end{array}$	$\begin{array}{r} 64 \\ -18 \\ \hline \end{array}$	$\begin{array}{r} 86 \\ -57 \\ \hline \end{array}$	$\begin{array}{r} 41 \\ -16 \\ \hline \end{array}$	$\begin{array}{r} 53 \\ -29 \\ \hline \end{array}$
<b>4.</b>	$\begin{array}{r} 24 \\ -17 \\ \hline \end{array}$	$\begin{array}{r} 60 \\ -20 \\ \hline \end{array}$	$\begin{array}{r} 86 \\ -27 \\ \hline \end{array}$	$\begin{array}{r} 93 \\ -26 \\ \hline \end{array}$	$\begin{array}{r} 52 \\ -17 \\ \hline \end{array}$	$\begin{array}{r} 47 \\ -28 \\ \hline \end{array}$
<b>5.</b>	$\begin{array}{r} 86 \\ -38 \\ \hline \end{array}$	$\begin{array}{r} 45 \\ -18 \\ \hline \end{array}$	$\begin{array}{r} 42 \\ -19 \\ \hline \end{array}$	$\begin{array}{r} 96 \\ -39 \\ \hline \end{array}$	$\begin{array}{r} 63 \\ -27 \\ \hline \end{array}$	$\begin{array}{r} 87 \\ -68 \\ \hline \end{array}$
<b>6.</b>	$\begin{array}{r} 53 \\ -17 \\ \hline \end{array}$	$\begin{array}{r} 92 \\ -45 \\ \hline \end{array}$	$\begin{array}{r} 86 \\ -18 \\ \hline \end{array}$	$\begin{array}{r} 72 \\ -17 \\ \hline \end{array}$	$\begin{array}{r} 63 \\ -45 \\ \hline \end{array}$	$\begin{array}{r} 52 \\ -13 \\ \hline \end{array}$

# Lesson 1.7 Adding Three Numbers

Add the ones.

$$\begin{array}{r} 23 \\ 47 \\ +16 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ 7 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ +6 \\ \hline \end{array}$$

16 or 10 + 6

$$\begin{array}{r} 23 \\ 47 \\ +16 \\ \hline 6 \end{array}$$

Add the tens.

$$\begin{array}{r} 23 \\ 47 \\ +16 \\ \hline 86 \end{array}$$

addend  
addend  
addend  
sum

Add.

- |    | a   | b  | c  | d  | e  | f  |
|----|---|--|--|--|--|--|
| 1. | $\begin{array}{r} 13 \\ 26 \\ +45 \\ \hline 84 \end{array}$ | $\begin{array}{r} 7 \\ 29 \\ +56 \\ \hline \end{array}$  | $\begin{array}{r} 16 \\ 23 \\ +25 \\ \hline \end{array}$ | $\begin{array}{r} 27 \\ 7 \\ +34 \\ \hline \end{array}$  | $\begin{array}{r} 6 \\ 13 \\ +29 \\ \hline \end{array}$  | $\begin{array}{r} 10 \\ 30 \\ +50 \\ \hline \end{array}$ |
| 2. | $\begin{array}{r} 22 \\ 31 \\ +45 \\ \hline \end{array}$    | $\begin{array}{r} 19 \\ 21 \\ +32 \\ \hline \end{array}$ | $\begin{array}{r} 29 \\ 16 \\ +15 \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ 15 \\ +25 \\ \hline \end{array}$ | $\begin{array}{r} 42 \\ 21 \\ +8 \\ \hline \end{array}$  | $\begin{array}{r} 26 \\ 23 \\ +35 \\ \hline \end{array}$ |
| 3. | $\begin{array}{r} 11 \\ 30 \\ +42 \\ \hline \end{array}$    | $\begin{array}{r} 27 \\ 16 \\ +9 \\ \hline \end{array}$  | $\begin{array}{r} 4 \\ 7 \\ +8 \\ \hline \end{array}$    | $\begin{array}{r} 34 \\ 16 \\ +41 \\ \hline \end{array}$ | $\begin{array}{r} 16 \\ 23 \\ +35 \\ \hline \end{array}$ | $\begin{array}{r} 29 \\ 31 \\ +25 \\ \hline \end{array}$ |
| 4. | $\begin{array}{r} 82 \\ 5 \\ +9 \\ \hline \end{array}$      | $\begin{array}{r} 33 \\ 47 \\ +12 \\ \hline \end{array}$ | $\begin{array}{r} 86 \\ 5 \\ +2 \\ \hline \end{array}$   | $\begin{array}{r} 18 \\ 32 \\ +16 \\ \hline \end{array}$ | $\begin{array}{r} 46 \\ 29 \\ +16 \\ \hline \end{array}$ | $\begin{array}{r} 53 \\ 21 \\ +15 \\ \hline \end{array}$ |
| 5. | $\begin{array}{r} 66 \\ 21 \\ +8 \\ \hline \end{array}$     | $\begin{array}{r} 47 \\ 13 \\ +8 \\ \hline \end{array}$  | $\begin{array}{r} 22 \\ 41 \\ +28 \\ \hline \end{array}$ | $\begin{array}{r} 23 \\ 15 \\ +17 \\ \hline \end{array}$ | $\begin{array}{r} 18 \\ 16 \\ +24 \\ \hline \end{array}$ | $\begin{array}{r} 23 \\ 35 \\ +17 \\ \hline \end{array}$ |

# Lesson 1.8 Addition and Subtraction Practice

Add or subtract.

	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>
<b>1.</b>	$\begin{array}{r} 23 \\ -10 \\ \hline \end{array}$	$\begin{array}{r} 76 \\ +21 \\ \hline \end{array}$	$\begin{array}{r} 82 \\ -19 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ 7 \\ +13 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ +35 \\ \hline \end{array}$	$\begin{array}{r} 76 \\ -30 \\ \hline \end{array}$

<b>2.</b>	$\begin{array}{r} 20 \\ +50 \\ \hline \end{array}$	$\begin{array}{r} 30 \\ -13 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ 13 \\ +23 \\ \hline \end{array}$	$\begin{array}{r} 76 \\ -43 \\ \hline \end{array}$	$\begin{array}{r} 87 \\ -45 \\ \hline \end{array}$	$\begin{array}{r} 92 \\ -79 \\ \hline \end{array}$
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<b>3.</b>	$\begin{array}{r} 26 \\ +58 \\ \hline \end{array}$	$\begin{array}{r} 96 \\ -17 \\ \hline \end{array}$	$\begin{array}{r} 72 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 79 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ - 8 \\ \hline \end{array}$	$\begin{array}{r} 18 \\ 12 \\ +42 \\ \hline \end{array}$
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<b>4.</b>	$\begin{array}{r} 86 \\ -19 \\ \hline \end{array}$	$\begin{array}{r} 77 \\ +16 \\ \hline \end{array}$	$\begin{array}{r} 43 \\ -29 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 82 \\ -42 \\ \hline \end{array}$	$\begin{array}{r} 86 \\ -39 \\ \hline \end{array}$
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<b>5.</b>	$\begin{array}{r} 57 \\ -43 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ +9 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ +30 \\ \hline \end{array}$	$\begin{array}{r} 41 \\ -22 \\ \hline \end{array}$	$\begin{array}{r} 18 \\ 42 \\ +13 \\ \hline \end{array}$	$\begin{array}{r} 18 \\ +53 \\ \hline \end{array}$
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<b>6.</b>	$\begin{array}{r} 81 \\ -79 \\ \hline \end{array}$	$\begin{array}{r} 27 \\ +34 \\ \hline \end{array}$	$\begin{array}{r} 86 \\ +13 \\ \hline \end{array}$	$\begin{array}{r} 92 \\ -36 \\ \hline \end{array}$	$\begin{array}{r} 37 \\ -24 \\ \hline \end{array}$	$\begin{array}{r} 86 \\ + 5 \\ \hline \end{array}$
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