Name _____

# Number Patterns

**Find the sum. Then use the Commutative Property of Addition to write the related addition sentence.**

1.  $9 + 2 = \underline{11}$

$\underline{2} + \underline{9} = \underline{11}$

4.  $3 + 10 = \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

7.  $8 + 9 = \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

2.  $4 + 7 = \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

5.  $6 + 7 = \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

8.  $0 + 4 = \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

3.  $3 + 6 = \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

6.  $7 + 5 = \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

9.  $9 + 6 = \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

**Is the sum even or odd? Write *even* or *odd*.**

10. $5 + 2$ _____

11. $6 + 4$ _____

12. $1 + 0$ _____

13. $5 + 5$ _____

14. $3 + 8$ _____

15. $7 + 7$ _____

# Problem Solving REAL WORLD

16. Ada writes $10 + 8 = 18$ on the board. Maria wants to use the Commutative Property of Addition to rewrite Ada's addition sentence. What number sentence should Maria write?

_____

17. Jackson says he has an odd number of model cars. He has 6 cars on one shelf and 8 cars on another shelf. Is Jackson correct? **Explain.**

_____

_____

_____

Name _____

# Round to the Nearest Ten or Hundred

Locate and label 739 on the number line.
Round to the nearest hundred.



600      700      800      900

1. 739 is between _700_ and _800_.

2. 739 is closer to _____ than it is to _____.

3. 739 rounded to the nearest hundred is _____.

**Round to the nearest ten and hundred.**

**4.** 363 _____        **5.** 829 _____        **6.** 572 _____

_____        _____        _____

**7.** 209 _____        **8.** 663 _____        **9.** 949 _____

_____        _____        _____

**10.** 762 _____        **11.** 399 _____        **12.** 402 _____

_____        _____        _____

# Problem Solving REAL WORLD

**13.** The baby elephant weighs 435 pounds. What is its weight rounded to the nearest hundred pounds?

**14.** Jayce sold 218 cups of lemonade at his lemonade stand. What is 218 rounded to the nearest ten?

_____        _____

# Estimate Sums

Use rounding or compatible numbers to estimate the sum.

1.  $\begin{array}{r} 198 \\ + 727 \\ \hline \end{array}$   $\begin{array}{r} 200 \\ + 725 \\ \hline 925 \end{array}$

2.  $\begin{array}{r} 87 \\ + 34 \\ \hline \end{array}$   $+ \underline{\hspace{2cm}}$

3.  $\begin{array}{r} 222 \\ + 203 \\ \hline \end{array}$   $+ \underline{\hspace{2cm}}$

4.  $\begin{array}{r} 52 \\ + 39 \\ \hline \end{array}$   $+ \underline{\hspace{2cm}}$

5.  $\begin{array}{r} 256 \\ + 321 \\ \hline \end{array}$   $+ \underline{\hspace{2cm}}$

6.  $\begin{array}{r} 302 \\ + 412 \\ \hline \end{array}$   $+ \underline{\hspace{2cm}}$

7.  $\begin{array}{r} 519 \\ + 124 \\ \hline \end{array}$   $+ \underline{\hspace{2cm}}$

8.  $\begin{array}{r} 790 \\ + 112 \\ \hline \end{array}$   $+ \underline{\hspace{2cm}}$

9.  $\begin{array}{r} 547 \\ + 326 \\ \hline \end{array}$   $+ \underline{\hspace{2cm}}$

10. $325 + 458$

$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

11. $620 + 107$

$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

# Problem Solving REAL WORLD

12. Stephanie read 72 pages on Sunday and 83 pages on Monday. About how many pages did Stephanie read during the two days?

_____

13. Matt biked 345 miles last month. This month he has biked 107 miles. Altogether, about how many miles has Matt biked last month and this month?
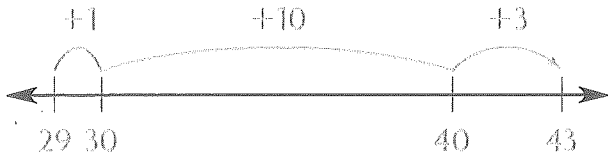
_____

# Mental Math Strategies for Addition

**Count by tens and ones to find the sum.**
**Use the number line to show your thinking.**

1. $29 + 14 =$ __43__



2. $36 + 28 =$ _____

3. $45 + 26 =$ _____

4. $52 + 34 =$ _____

**Use mental math to find the sum.**
**Draw or describe the strategy you use.**

5. $52 + 19 =$ _____

6. $122 + 306 =$ _____

# Problem Solving REAL WORLD

7. Shelley spent 17 minutes washing the dishes. She spent 38 minutes cleaning her room. **Explain** how you can use mental math to find how long Shelley spent on the two tasks.

_____

_____

_____

8. It took Marty 42 minutes to write a book report. Then he spent 18 minutes correcting his report. **Explain** how you can use mental math to find how long Marty spent on his book report.

_____

_____

_____

Name _____

## Use Properties to Add

Use addition properties and strategies to find
the sum.

**1.** $34 + 62 + 51 + 46 =$ ___193___

$$
\begin{array}{r}
34 \\
46 \\
62 \\
+\ 51 \\
\hline
193
\end{array}
$$

**2.** $27 + 68 + 43 =$ _____

**3.** $42 + 36 + 18 =$ _____

**4.** $74 + 35 + 16 + 45 =$ _____

**5.** $41 + 26 + 149 =$ _____

**6.** $52 + 64 + 28 + 44 =$ _____

## Problem Solving REAL WORLD

**7.** A pet shelter has 26 dogs, 37 cats, and 14 gerbils. How many of these animals are in the pet shelter in all?

**8.** The pet shelter bought 85 pounds of dog food, 50 pounds of cat food, and 15 pounds of gerbil food. How many pounds of animal food did the pet shelter buy?

_____

_____

# Use the Break Apart Strategy to Add

~~Estimate.~~ Then use the break apart strategy to find the sum.

*(AKA - Expanded) Notation )*

**1.** ~~Estimate:~~ ~~800~~

$$
\begin{array}{rcl}
325 &=& 300 + 20 + 5 \\
+\ 494 &=& 400 + 90 + 4 \\
\hline
 & & 700 + 110 + 9
\end{array}
$$

**2.** ~~Estimate:~~ _____

$$
\begin{array}{rcl}
518 &=& \\
+\ 372 &=&
\end{array}
$$

**3.** ~~Estimate:~~ _____

$$
\begin{array}{rcl}
473 &=& \\
+\ 123 &=&
\end{array}
$$

**4.** ~~Estimate:~~ _____

$$
\begin{array}{rcl}
208 &=& \\
+\ 569 &=&
\end{array}
$$

**5.** ~~Estimate:~~ _____

$$
\begin{array}{rcl}
731 &=& \\
+\ 207 &=&
\end{array}
$$

**6.** ~~Estimate:~~ _____

$$
\begin{array}{rcl}
495 &=& \\
+\ 254 &=&
\end{array}
$$

# Problem Solving REAL WORLD

Use the table for 7–8.

**7.** Laura is making a building using Set A and Set C. How many blocks can she use in her building?

_____

**8.** Clark is making a building using Set B and Set C. How many blocks can he use in his building?

_____

| Build-It Blocks | |
| --- | --- |
| Set | Number of Blocks |
| A | 165 |
| B | 188 |
| C | 245 |

Name _____

# Use Place Value to Add

## Lesson 1.7

**COMMON CORE STANDARD CC.3.NBT.2**
Use place value understanding and properties of
operations to perform multi-digit arithmetic.

Estimate. Then find the sum.

1. Estimate: 600

$$\begin{array}{r} \overset{1}{3}24 \\ +\ 285 \\ \hline 609 \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 519 \\ +\ 347 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 323 \\ +\ 151 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 169 \\ +\ 354 \\ \hline \end{array}$$

5. Estimate: _____

$$\begin{array}{r} 148 \\ +\ 285 \\ \hline \end{array}$$

6. Estimate: _____

$$\begin{array}{r} 270 \\ +\ 453 \\ \hline \end{array}$$

7. Estimate: _____

$$\begin{array}{r} 275 \\ +\ 116 \\ \hline \end{array}$$

8. Estimate: _____

$$\begin{array}{r} 157 \\ +\ 141 \\ \hline \end{array}$$

9. Estimate: _____

$$\begin{array}{r} 127 \\ +\ 290 \\ \hline \end{array}$$

10. Estimate: _____

$$\begin{array}{r} 258 \\ +\ 565 \\ \hline \end{array}$$

11. Estimate: _____

$$\begin{array}{r} 311 \\ +\ 298 \\ \hline \end{array}$$

12. Estimate: _____

$$\begin{array}{r} 534 \\ +\ 256 \\ \hline \end{array}$$

# Problem Solving REAL WORLD

13. Mark has 215 baseball cards. Emily has 454 baseball cards. How many baseball cards do Mark and Emily have altogether?

_____

14. Jason has 330 pennies. Richie has 268 pennies. Rachel has 381 pennies. Which two students have more than 700 pennies combined?

_____

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Name _____

# Estimate Differences

Use rounding or compatible numbers to estimate the difference.

1.
$$\begin{array}{r} 40 \\ -\ 13 \\ \hline \end{array}$$
$$\begin{array}{r} 40 \\ -\ 10 \\ \hline 30 \end{array}$$

2.
$$\begin{array}{r} 762 \\ -\ 332 \\ \hline \end{array}$$  — _____

3.
$$\begin{array}{r} 823 \\ -\ 242 \\ \hline \end{array}$$  — _____

4.
$$\begin{array}{r} 98 \\ -\ 49 \\ \hline \end{array}$$  — _____

5.
$$\begin{array}{r} 287 \\ -\ 162 \\ \hline \end{array}$$  — _____

6.
$$\begin{array}{r} 359 \\ -\ 224 \\ \hline \end{array}$$  — _____

7.
$$\begin{array}{r} 68 \\ -\ 31 \\ \hline \end{array}$$  — _____

8.
$$\begin{array}{r} 476 \\ -\ 155 \\ \hline \end{array}$$  — _____

9.
$$\begin{array}{r} 622 \\ -\ 307 \\ \hline \end{array}$$  — _____

10. $771 - 531$

_____ — _____ = _____

11. $299 - 61$

_____ — _____ = _____

# Problem Solving REAL WORLD

**12.** Ben has a collection of 812 stamps. He gives his brother 345 stamps. About how many stamps does Ben have left?

_____

**13.** Savannah's bakery sold 284 pies in September. In October the bakery sold 89 pies. About how many more pies did Savannah's bakery sell in September than in October?

_____

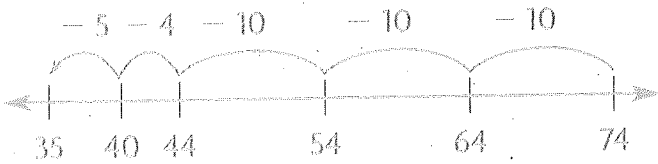Name _____

# Mental Math Strategies for Subtraction

Use mental math to find the difference.
Draw or describe the strategy you use.

1. $74 - 39 =$ __35__

```
  -5  -4  -10      -10       -10
  ⌒   ⌒   ⌒         ⌒         ⌒
◄─┼───┼───┼─────────┼─────────┼──►
 35  40  44        54        64        74
```

2. $93 - 28 =$ _____

3. $51 - 9 =$ _____

4. $76 - 23 =$ _____

5. $357 - 214 =$ _____

6. $285 - 99 =$ _____

# Problem Solving REAL WORLD

7. Ruby has 78 books. Thirty-one of the books are on shelves. The rest are still packed in boxes. How many of Ruby's books are still in boxes?

8. Kyle has 130 pins in his collection. He has 76 of the pins displayed on his wall. The rest are in a drawer. How many of Kyle's pins are in a drawer?

_____

_____

Name _____

# Use Place Value to Subtract

## Estimate. Then find the difference.

1. Estimate: ~~500~~

$$\begin{array}{r} ^{7\ 15}585 \\ -\ 119 \\ \hline \end{array}$$

2. Estimate:

$$\begin{array}{r} 738 \\ -\ 227 \\ \hline \end{array}$$

3. Estimate:

$$\begin{array}{r} 651 \\ -\ 376 \\ \hline \end{array}$$

4. Estimate:

$$\begin{array}{r} 815 \\ -\ 281 \\ \hline \end{array}$$

5. Estimate:

$$\begin{array}{r} 487 \\ -\ 290 \\ \hline \end{array}$$

6. Estimate:

$$\begin{array}{r} 936 \\ -\ 329 \\ \hline \end{array}$$

7. Estimate:

$$\begin{array}{r} 270 \\ -\ 128 \\ \hline \end{array}$$

8. Estimate:

$$\begin{array}{r} 364 \\ -\ 177 \\ \hline \end{array}$$

9. Estimate:

$$\begin{array}{r} 627 \\ -\ 253 \\ \hline \end{array}$$

10. Estimate:

$$\begin{array}{r} 862 \\ -\ 419 \\ \hline \end{array}$$

11. Estimate:

$$\begin{array}{r} 726 \\ -\ 148 \\ \hline \end{array}$$

12. Estimate:

$$\begin{array}{r} 543 \\ -\ 358 \\ \hline \end{array}$$

# Problem Solving REAL WORLD

13. Mrs. Cohen has 427 buttons. She uses 195 buttons to make puppets. How many buttons does Mrs. Cohen have left?

14. There were 625 ears of corn and 247 tomatoes sold at a farm stand. How many more ears of corn were sold than tomatoes?

_____

_____

Name _____

# Combine Place Values to Subtract

Estimate. Then find the difference.

1. Estimate: 200

$$476 - 269$$

2. Estimate: _____

$$615 - 342$$

3. Estimate: _____

$$508 - 113$$

4. Estimate: _____

$$716 - 229$$

5. Estimate: _____

$$700 - 326$$

6. Estimate: _____

$$325 - 179$$

7. Estimate: _____

$$935 - 813$$

8. Estimate: _____

$$358 - 292$$

9. Estimate: _____

$$826 - 617$$

10. Estimate: _____

$$900 - 158$$

11. Estimate: _____

$$607 - 568$$

12. Estimate: _____

$$973 - 869$$

# Problem Solving REAL WORLD

13. Bev scored 540 points. This was 158 points more than Ike scored. How many points did Ike score?

_____

14. A youth group earned $285 washing cars. The group's expenses were $79. How much profit did the group make washing cars?

_____

Name _____

# Problem Solving • Model Addition and Subtraction

COMMON CORE STANDARD CC.3.OA.8
Solve problems involving the four operations, and
identify and explain patterns in arithmetic.

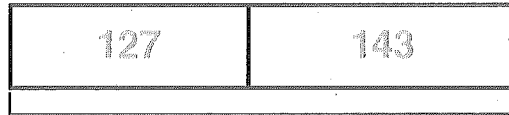**Use the bar model to solve the problem.**

1. Elena went bowling. Elena's score in the first game
was 127. She scored 16 more points in the second
game than in the first game. What was her total score?

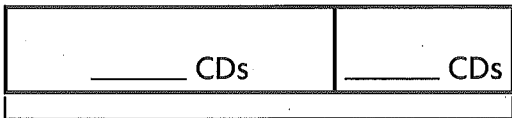| 127 | 16 |
|---|---|

▲ points

| 127 | 143 |
|---|---|

■ points

$$127 + 16 = ▲$$
$$143 = ▲$$

$$127 + 143 = ■$$
$$270 = ■$$

___270 points___

2. Mike's Music sold 287 CDs on the first day of a 2-day
sale. The store sold 96 more CDs on the second day
than on the first day. How many CDs in all were sold
during the 2-day sale?

| _____ CDs | _____ CDs |
|---|---|

✦ CDs

✦ =

| _____ CDs | _____ CDs |
|---|---|

◆ CDs

◆ =

_____

# Chapter 1 Extra Practice

## Lesson 1.1

Find the sum. Then use the Commutative Property of Addition to write the related addition sentence.

**1.** $5 + 7 =$ _____

_____ + _____ = _____

**2.** $4 + 9 =$ _____

_____ + _____ = _____

**3.** $0 + 5 =$ _____

_____ + _____ = _____

## Lesson 1.2

Round to the nearest ten and hundred.

**1.** 622 _____

_____

**2.** 307 _____

_____

**3.** 867 _____

_____

## Lesson 1.3

Use rounding or compatible numbers to estimate the sum.

**1.**
$$\begin{array}{r} 24 \\ + \ 82 \\ \hline \end{array} \quad + \ \underline{\hspace{2cm}}$$

**2.**
$$\begin{array}{r} 112 \\ + \ 279 \\ \hline \end{array} \quad + \ \underline{\hspace{2cm}}$$

**3.**
$$\begin{array}{r} 583 \\ + \ 169 \\ \hline \end{array} \quad + \ \underline{\hspace{2cm}}$$

## Lesson 1.4

Use mental math to find the sum.

**1.** $71 + 99 =$ _____

**2.** $38 + 58 =$ _____

**3.** $307 + 418 =$ _____

## Lesson 1.5

Use addition properties and strategies to find the sum.

**1.** $13 + 47 + 21 + 79 =$ _____

**2.** $55 + 18 + 15 + 43 =$ _____