

Name _____

Mental Math: Adding

P 2-1

Add. Use mental math.

1. $89 + 46$

2. $301 + 61$

3. $400 + 157$

4. $722 + 158$

5. $523 + 223$

6. $804 + 396$

7. $299 + 206$

8. $878 + 534$

9. $1,000 + 7,000$

10. **Reasoning** How can you write $52 + (8 + 25)$ to make it easier to add?

Use mental math to find the cost of a pound of

11. apples and a pound of oranges.

12. bananas and a pound of grapefruits.

Fruit	Price per Pound
Apple	\$0.67
Orange	\$0.98
Banana	\$0.45
Grapefruit	\$0.82

Test Prep

13. Stanley has \$10.00. He buys bread for \$3.47 and orange juice for \$2.53. How much money does Stanley have left?

A. \$3.00

B. \$4.00

C. \$6.53

D. \$8.47

14. **Writing in Math** Explain how you could add $678 + 303$ using mental math.

Name _____

Mental Math: Subtracting

P 2-2

Subtract. Use mental math.

1. $53 - 21 =$ _____ 2. $101 - 49 =$ _____ 3. $224 - 26 =$ _____

4. $568 - 352 =$ _____ 5. $120 - 33 =$ _____ 6. $900 - 187 =$ _____

7. $141 - 98 =$ _____ 8. $409 - 11 =$ _____ 9. $554 - 59 =$ _____

10. **Number Sense** To subtract 37 from 462 using mental math, you first subtract 40 from 462 and get 422. What should you do next to get the final answer?

Use mental math to find the difference in height between

11. Angel and Tugela.

12. Yosemite and Cuquenán.

World-Class Waterfalls

Name	Height (meters)
Angel	979
Tugela	948
Yosemite	739
Cuquenán	610

Test Prep

13. Dana has 205 cm of ribbon. She uses 64 cm of ribbon to tie a package. Which simpler problems could she use to find out how much ribbon she has left?

A. $205 - 60$ and $145 - 4$

B. $205 + 64$ and $269 + 1$

C. $205 - 60$ and $145 + 4$

D. $200 - 64$ and $136 - 5$

14. **Writing in Math** Explain how you would count on to find $350 - 156$.

Name _____

Estimating Sums and Differences

P 2-3

Estimate each sum or difference.

1.
$$\begin{array}{r} 627 \\ + 95 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 829 \\ - 292 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 987 \\ - 233 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 1,568 \\ + 352 \\ \hline \end{array}$$

5. $4,263 - 1,613$ _____

6. $7,502 + 2,187$ _____

7. $24,141 - 2,177$ _____

8. $64,099 - 55,555$ _____

9. $83,595 + 18,999$ _____

10. About how much larger is the largest ocean than the smallest ocean?
- _____
- _____
- _____

Ocean Area

Ocean	Area (million sq km)
Arctic Ocean	13,986
Atlantic Ocean	82,217
Indian Ocean	73,481
Pacific Ocean	165,384

11. About how many million square kilometers do all the oceans together cover?
- _____

Test Prep

12. Mallory is a pilot. Last week she flew the following round trips in miles: 2,020; 1,358; 952; 2,258; and 1,888. Which of the following is a good estimate of the miles Mallory flew last week?

A. 6,000 mi B. 6,800 mi C. 7,600 mi D. 8,600 mi

13. **Writing in Math** Explain how you would use front-end estimation to subtract 189 from 643.
- _____
- _____

Name _____

Overestimates and Underestimates P 2-4

Estimate each sum or difference. Then, if possible, tell whether your estimate is an overestimate or an underestimate.

1. $448 + 492$ _____

2. $7,926 - 4,002$ _____

3. $1,922 + 4,498$ _____

4. $5,647 - 2,089$ _____

5. $829 - 673$ _____

6. $7,122 + 2,692$ _____

7. **Number Sense** Erin estimated $212 + 756$ by adding $200 + 800$. Is Erin's estimate an overestimate or an underestimate? _____

8. Joel needs \$285 for a video game system. He earned \$95 mowing lawns and \$112 delivering newspapers. About how much more money does Joel need? Explain how you estimated. Then tell whether your estimate is an overestimate or an underestimate.

Test Prep

9. Which of the following is an estimate of the difference: $3,492 - 1,429$?

A. 700

B. 2,000

C. 5,000

D. 9,000

10. **Writing in Math** Jeremy estimated $927 + 346$ by adding $900 + 300$. Explain why Jeremy's estimate is an underestimate.

Name _____

Adding Whole Numbers and Money P 2-5

1.
$$\begin{array}{r} 474 \\ + 92 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 947 \\ + 261 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 9,746 \\ + 4,329 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 2,868 \\ + 643 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 87,643 \\ + 3,892 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 17,246 \\ + 42,369 \\ \hline \end{array}$$

7.
$$\begin{array}{r} \$46.96 \\ + 2.43 \\ \hline \end{array}$$

8.
$$\begin{array}{r} \$45.19 \\ + 39.46 \\ \hline \end{array}$$

9. $714 + 395$

10. $2,002 + 3,003$

11. $\$8.27 + \29.46

12. **Number Sense** Jacob adds 4,296 and 7,127. Should his answer be greater than or less than 11,000?

Zachary and Travis went out for lunch.

13. Zachary ordered a veggieburger and a large juice. How much was Zachary's total?

Menu	
Veggie burger	\$2.75
Fish sandwich	\$1.95
Milk	\$0.95
Large juice	\$2.25

14. Travis ordered a fish sandwich and a milk. How much was his total?

Test Prep

15. Lydia bought a baseball for \$6.89 and a baseball bat for \$23.46. How much did she spend altogether?

A. \$25.30

B. \$28.93

C. \$30.35

D. \$31.41

16. **Writing in Math** Samuel has 1,482 baseball cards in his collection. Maria gave Samuel 126 cards. How many cards does he have now? Explain what computation method you used and why.

Name _____

Column Addition P 2-6

Add.

$$\begin{array}{r} 1. \quad 486 \\ 875 \\ + 45 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad \$43.34 \\ 49.48 \\ + 8.90 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 938 \\ 1,487 \\ + 8,947 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 7,226 \\ 1,587 \\ + 72,984 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad \$542.36 \\ 2.23 \\ + 78.56 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 80 \\ 960 \\ 4 \\ + 1,986 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad \$279.87 \\ 20.96 \\ 150.98 \\ + 79.45 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 8,738 \\ 5,234 \\ 836 \\ + 237 \\ \hline \end{array}$$

9. **Number Sense** Luke added $429 + 699 + 314$ and got 950. Is this sum reasonable?

10. What is the combined length of the three longest glaciers?

World's Longest Glaciers

Glaciers	Length (miles)
Lambert-Fisher Ice Passage	320
Novaya Zemlya	260
Arctic Institute Ice Passage	225
Nimrod-Lennox-King	180

11. What is the total combined length of the four longest glaciers in the world?

Test Prep

12. Which is the sum of $3,774 + 8,276 + 102$?

A. 1,251

B. 12,152

C. 13,052

D. 102,152

13. **Writing in Math** Leona added $6,641 + 1,482 + 9,879$. Should her answer be more than or less than 15,000?

Name _____

Subtracting Whole Numbers and Money

P 2-7

Subtract.

1.
$$\begin{array}{r} 906 \\ - 45 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 3,091 \\ - 1,361 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 4,000 \\ - 2,557 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 7,242 \\ - 158 \\ \hline \end{array}$$

5.
$$\begin{array}{r} \$5.23 \\ - 2.03 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 8,904 \\ - 3,596 \\ \hline \end{array}$$

7.
$$\begin{array}{r} \$30.04 \\ - 21.06 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 848 \\ - 257 \\ \hline \end{array}$$

9. $\$74.03 - \32.54

10. $5,067 - 2,987$

11. $\$67.97 - \12.98

12. Robert set a goal to swim 1,000 laps in the local swimming pool during his summer break. Robert has currently finished 642 laps. How many more laps does he have to swim in order to meet his goal?

Test Prep

13. Which of the following shows 22 dollars and 7 pennies subtracted from 130 dollars and 10 pennies?

A. \$152.17

B. \$108.03

C. \$107.31

D. \$78.03

14. **Writing in Math** If $694 - 72 = \underline{\hspace{2cm}}$, then $622 + \underline{\hspace{2cm}} = 694$. Explain the process of checking your work.

Name _____

Choose a Computation Method

P 2-8

Add or subtract. Tell what method you used.

1.
$$\begin{array}{r} \$5,749 \\ + 8,274 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 84,936 \\ - 27,946 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 70,000 \\ + 30,000 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 56,935 \\ + 3,964 \\ \hline \end{array}$$

5.
$$\begin{array}{r} \$95,629 \\ - 7,846 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 26,000 \\ - 4,000 \\ \hline \end{array}$$

7. $\$3,210 - \$1,989 =$ _____

8. $4,440 + 560 =$ _____

9. An African elephant weighs 11,023 lb. An Asian elephant weighs 8,818 lb. What is the total combined weight of an African elephant and an Asian elephant?

10. A hippopotamus weighs 4,409 lb. A white rhinoceros weighs 4,850 lb. How much less does the hippopotamus weigh than the white rhinoceros?

Test Prep

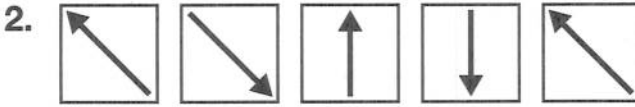
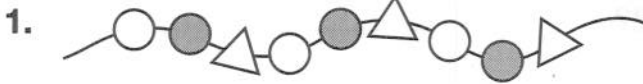
11. Which number sentence is easiest to compute using mental math?

A. $1,502 - 685$ B. $1,530 + 120$ C. $652 + 989$ D. $1,596 + 3,628$

12. **Writing in Math** Explain how you would use mental math to find $1,201 + 8,793$. Solve.

PROBLEM-SOLVING STRATEGY**P 2-9****Look for a Pattern**

Look for a pattern. Draw the next two shapes.



Look for a pattern. Write the missing numbers.

3. 5, 8, 11, 14, 17, _____, _____ 4. 4, 6, 10, 16, 24, _____, _____

Look for a pattern. Complete each number sentence.

5. $80 + 8 = 88$

6. $10 + 1 = 11$

$808 + 80 = 888$

$100 + 1 = 101$

$8,008 + 880 = \underline{\hspace{2cm}}$

$1,000 + 1 = \underline{\hspace{2cm}}$

$80,808 + 8,080 = \underline{\hspace{2cm}}$

$10,000 + 1 = \underline{\hspace{2cm}}$

Look for a pattern. Write the missing numbers.

7. Sally went to purchase tiles for her kitchen floor. She measured the floor to find how many tiles she needed to cover the floor. Sally decided to make a pattern. She chose 10 red tiles,

20 beige tiles, 30 white tiles, _____ black tiles, and _____ gray tiles to complete a pattern for the kitchen floor.

8. **Reasoning** Fill in the missing amounts to update Carl's savings passbook.

Carl's Savings Account

Date	Deposit	Balance
4/7	\$25	\$945
4/14		\$995
4/21	\$25	
4/30	\$50	
5/7		\$1,095

Name _____

PROBLEM-SOLVING SKILL

P 2-10

Translating Words to Expressions

Write a number expression for each phrase.

1. 1,285 is how much more than 622?

2. \$402 increased by \$86

3. 946 beads, then 80 fewer beads

4. 12 adults combined with 26 children

Write a number expression and then solve.

5. How many people do the 8 in. salad bowl and the 12 in. salad bowl serve together?

6. How much more money does the 12 in. salad bowl cost compared to the 10 in. one?

Cathy's Salads

Size	Servings	Price
8 in. bowl	4	\$12.00
10 in. bowl	6	\$15.00
12 in. bowl	8	\$18.00

Write a number expression for the situation.

7. The bicycle museum had 220 fewer visitors this month than last month, when 980 people visited. How many people visited the museum this month?

8. **Writing in Math** Write a word problem that can be solved using the expression $96 - 23$.

Name _____

Matching Words and Number Expressions P 2-11

Choose the number expression that matches the words. Then, find its value.

1. Jaleesa made 24 blueberry muffins. She gave 10 muffins to her friends. Then Jaleesa made 2 more muffins.

$24 - (10 + 2)$ or $(24 - 10) + 2$

2. Antoine brought 24 bottles of juice to the picnic. The 14 people at the picnic each had 1 juice with their lunch. After the kids played soccer, Antoine's dad arrived with 12 more bottles of juice.

$(24 - 14) + 12$ or $24 - (14 + 12)$

Choose the number expression that matches the words. Then, find its value.

3. Saturn has 18 moons, Jupiter has 16 moons, and Neptune has 8 moons. How many more moons do Saturn and Jupiter have combined than Neptune?

$(18 + 16) - 8$ or $18 + (16 - 8)$

Test Prep

4. Which of the following is the value of the number expression $50 - (17 + 18)$?

A. 25

B. 20

C. 15

D. 10

5. **Writing in Math** Explain which operation you would do first in the expression $47 - (17 + 12)$.

Name _____

Evaluating Expressions P 2-12

Evaluate each expression for $y = 15$.

1. $y + 15$ _____

2. $y + 39$ _____

3. $85 - y$ _____

4. $51 - y$ _____

Find the missing numbers in each table.

5.

n	$n + 35$
2	
10	45
15	
95	

6.

x	$75 - x$
9	
25	50
35	
52	

7. Kiara saved \$27. She bought her mother a gift. She has \$13 left. How much did she spend on the gift? _____

8. Carlos had 11 cans of paint. He used 4 cans painting the garage. He bought 2 more cans. How many cans of paint does Carlos have now? _____

Test Prep

9. Which is the value of $a + 235$ when $a = 150$?

A. 85 B. 150 C. 385 D. 485

10. **Writing in Math** Explain how to evaluate $44 + x$ for $x = 34$.

Name _____

Solving Addition and Subtraction Equations

P 2-13

Solve each equation.

1. $d - 12 = 12$

$d =$ _____

2. $82 + b = 90$

$b =$ _____

3. $f + 50 = 300$

$f =$ _____

4. $q - 800 = 200$

$q =$ _____

5. $9 + k = 18$

$k =$ _____

6. $90 - w = 88$

$w =$ _____

7. **Number Sense** Is the solution of $25 + n = 30$ greater or less than 30? Explain how you know without solving.

8. Andre bought a model airplane. He also bought a tube of glue for \$6. He spent \$22. Use the equation $a + \$6 = \22 to find the cost of the model airplane.

Test Prep

9. Which is the value of the variable in the equation $r - 126 = 19$?

A. 245

B. 145

C. 107

D. 49

10. **Writing in Math** Explain how the variable b has two different values in the two equations.

$6 - b = 5$

$b = 1$

$b + 5 = 15$

$b = 10$

Name _____

PROBLEM-SOLVING APPLICATIONS

P 2-14

A Piece of History

The Statue of Liberty, located on Liberty Island in New York, was given to the United States as a present from France on July 4, 1884. The statue was still in France at the time. It was taken apart and then shipped in sections to the United States in 1885.

A total of 350 pieces of the statue were shipped on the French transport ship *Isero*. The pieces were shipped in a total of 214 crates.

1. Suppose that, after arriving in the United States, it took two days to remove the first 108 crates. How many crates were still on the ship?

2. Suppose four different pieces of the statue had the following weights: 4,219 lb; 3,182 lb; 876 lb; and 1,215 lb. Find the total weight of the four pieces.

3. Admission to the Statue of Liberty is free. In 2002, the price for three adults to ride the ferry round trip was \$21. The price for five adults was \$35. What is the round-trip price for one adult?

4. Suppose there are 13 children who take the ferry during one trip to the Statue of Liberty. A total of 51 people take the trip. Write a number sentence to find the number of adults who take the ferry. Solve. Write your answer in a complete sentence.
