

Name _____

Mental Math

Show how you can use mental math to add or subtract.

1. $70 + 90 + 30 =$ _____ 2. $350 - 110 =$ _____

National Monuments

Name	State	Acres
George Washington Carver	Missouri	210
Navajo	Arizona	360
Fort Sumter	South Carolina	200
Russell Cave	Alabama	310

- How many more acres are there at Navajo monument than at George Washington Carver monument?

- How many acres are there at Fort Sumter and Russell Cave combined?

- Fresh Market bought 56 lb of apples in August from a local orchard. In September, the market purchased an additional 52 lb of apples and 32 lb of strawberries. How many pounds of fruit did the market buy?
A 108 lb B 140 lb C 150 lb D 240 lb

- Explain It** Write the definition and give an example of the Commutative Property of Addition.

Name _____

Practice

2-2

Rounding Whole Numbers and Decimals

Round each number to the place of the underlined digit.

1. 32.60 _____
2. 489,334,209 _____
3. 324,650 _____
4. 32.073 _____

5. **Reasoning** Name two different numbers that round to 30 when rounded to the nearest ten.
- _____

In 2000, Italy produced 7,464,000 tons of wheat, and Pakistan produced 21,079,000 tons of wheat. Round each country's wheat production in tons to the nearest hundred thousand.

6. Italy _____
7. Pakistan _____

The price of wheat in 1997 was \$3.38 per bushel. In 1998, the price was \$2.65 per bushel. Round the price per bushel of wheat for each year to the nearest tenth of a dollar.

8. 1997 _____
9. 1998 _____

10. **Number Sense** Which number rounds to 15,700,000 when rounded to the nearest hundred thousand?

A 15,000,000 B 15,579,999 C 15,649,999 D 15,659,999

11. **Explain It** Write a definition of rounding in your own words.
- _____
- _____

Name _____

Estimating Sums and Differences

Estimate each sum or difference.

1. $5,602 - 2,344$ _____ 2. $7.4 + 3.1 + 9.8$ _____

3. $2,314 + 671$ _____ 4. $54.23 - 2.39$ _____

5. **Number Sense** Wesley estimated $5.82 - 4.21$ to be about 2. Is this an overestimate or an underestimate? Explain.

Average Yearly Precipitation of U.S. Cities

City	Inches	Days
Asheville, North Carolina	47.71	124
Wichita, Kansas	28.61	85

6. Estimate the total precipitation in inches and the total number of days with precipitation for Asheville and Wichita.

7. **Reasonableness** Which numbers should you add to estimate the answer to this problem: $87,087 + 98,000$?

A $88,000 + 98,000$ C $87,000 + 98,000$

B $85,000 + 95,000$ D $80,000 + 90,000$

8. **Explain It** Estimate the total weight of two boxes that weigh 9.4 lb and 62.6 lb using rounding and compatible numbers. Which estimate is closer to the actual total weight? Why?

Name _____

Practice

2-4

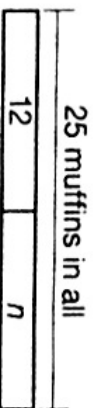
Problem Solving: Draw a Picture and Write an Equation

Write two different equations; then solve each problem.

1. Dayana picked apples for 2 hours. She picked 28 apples in the first hour, and at the end of two hours, she had 49. How many apples did she pick during the second hour? _____
2. Dixon bought a pack of pencils and then gave 12 away. He now has 24 left. How many pencils were in the pack of pencils that Dixon bought? _____

Copy and complete the picture. Then write an equation and solve.

3. Rumina is baking 25 muffins for the bake sale. She has already baked 12. How many more does she need to bake?



4. **Estimation** Janet saved 22 dollars one month and 39 dollars the next month. She wants to buy a bicycle that costs \$100. About how much more money does she need?

A about \$40 **B** about \$50 **C** about \$60 **D** about \$70

5. **Explain It** Stefany ran 2 miles each day for 14 days. How many miles did she run in 14 days? Explain two different ways to solve this problem, and then solve.

Name _____

Practice
2-5

Adding and Subtracting

Add or subtract.

1.
$$\begin{array}{r} 29,543 \\ + 13,976 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 93,210 \\ - 21,061 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 369,021 \\ - 325,310 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 893,887 \\ + 22,013 \\ \hline \end{array}$$

5. $971,234 + 55,423 =$ _____

6. **Number Sense** Is 4,000 a reasonable estimate for the difference of 9,215 – 5,022? Explain.

For questions 7 and 8, use the table at right:

7. How many people were employed as public officials and natural scientists?

People Employed in U.S. by Occupation in 2000

Occupation	Workers
Public officials	753,000
Natural scientists	566,000
University teachers	961,000
Lawyers and judges	926,000

8. How many more people were employed as university teachers than as lawyers and judges?

9. Which is the difference between 403,951 and 135,211?

A 200,000

B 221,365

C 268,740

D 539,162

10. **Explain It** Issac is adding 59,029 and 55,678. Should his answer be greater than or less than 100,000? Explain how you know.

Adding Decimals

Add.

1.
$$\begin{array}{r} 58.0 \\ + 3.6 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 40.5 \\ + 22.3 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 34.587 \\ + 21.098 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 43.1000 \\ + 8.4388 \\ \hline \end{array}$$

5. $16.036 + 7.009 = \underline{\hspace{2cm}}$

6. $92.30 + 0.32 = \underline{\hspace{2cm}}$

7. **Number Sense** Reilly adds 45.3 and 3.21. Should his sum be greater than or less than 48? Tell how you know.

In science class, students weighed different amounts of tin.

Carmen weighed 4.361 g, Kim weighed 2.704 g, Simon weighed 5.295 g, and Angelica weighed 8.537 g.

8. How many grams of tin did Carmen and Angelica have combined?

9. How many grams of tin did Kim and Simon have combined?

10. In December the snowfall was 0.03 in. and in January it was 2.1 in. Which was the total snowfall?

A 3.2 in.

B 2.40 in.

C 2.13 in.

D 0.03 in.

11. **Explain It** Explain why it is important to line up decimal numbers by their place value when you add or subtract them.

Subtracting Decimals

Subtract.

1.
$$\begin{array}{r} 92.1 \\ - 32.6 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 52.7 \\ - 36.9 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 85.76 \\ - 12.986 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 32.7 \\ - 2.328 \\ \hline \end{array}$$

5. $8.7 - 0.3 =$ _____

6. $23.3 - 1.32 =$ _____

7. **Number Sense** Kelly subtracted 2.3 from 20 and got 17.7. Explain why this answer is reasonable.

At a local swim meet, the second-place swimmer of the 100-m freestyle had a time of 9.33 sec. The first-place swimmer's time was 1.32 sec faster than the second-place swimmer. The third-place time was 13.65 sec.

8. What was the time for the first-place swimmer? _____
9. What was the difference in time between the second- and third-place swimmers? _____
10. Miami's annual precipitation in 2000 was 61.05 in. Albany's was 46.92 in. How much greater was Miami's precipitation than Albany's?
A 107.97 in. B 54.31 in. C 14.93 in. D 14.13 in.
11. **Explain It** Explain how to subtract 7.6 from 20.39.

Problem Solving: Multiple-Step Problems

Solve.

1. Theater tickets for children cost \$5. Adult tickets cost \$3 more. If 2 adults and 2 children buy theater tickets, what is the total cost?

2. Luis has a \$10 bill and three \$5 bills. He spends \$12.75 on the entrance fee to an amusement park and \$8.50 on snacks. How much money does he have left?

3. **Number Sense** Alexandra earns \$125 from her paper route each month, but she spends about \$20 each month on personal expenses. To pay for a school trip that costs \$800, about how many months does she need to save money? Explain.

4. **Critical Thinking** Patty is a member of the environmental club. Each weekday, she volunteers for 2 hours. On Saturday and Sunday, she volunteers 3 hours more each day. Which expression shows how to find the number of hours she volunteers in one week?

- A** $2 + 5$
B $2 + 2 + 2 + 2 + 2 + 5 + 5$
C $2 + 2 + 2 + 3 + 3$
D $2 + 3 + 3$

5. **Explain It** Marco's goal is to eat only 2,000 calories each day. One day for breakfast he consumed 310 calories, for lunch he consumed 200 more calories than breakfast, and for dinner he consumed 800. Did he make his goal? Explain.
