

1-1 Practice: Problem Solving

Solve.

- 1 **SCHOOL** Herman's locker is between Elio's and Mac's lockers. Elio's locker is 67 and Mac's is 70. What is Herman's locker number? _____
- 2 **MOVIES** Sasha and Nick have movie tickets. Sasha's seat is Row A, Seat 12. Nick has the seat after that. What is the number of Nick's seat? _____
- 3 **PUZZLES** I am a counting number between 69 and 78. I have one digit that is a 1. What number am I? _____
- 4 **CONCERTS** Angela, Mickey, and Stacey are going to a concert. They bought three tickets together. Angela lost her ticket. Mickey's seat number is 27 and Stacey's seat number is 28. What two seats could Angela be in if they are all supposed to sit together? _____
- 5 **TRAVEL** Nicolás is visiting his aunt this month. He cannot remember what highway exit to use. He remembers that his aunt's exit is between exit 38 and exit 40. What exit should he use to get to his aunt's house? _____
- 6 **SOFTBALL** Tanya's softball team has won the division championship 7 times. Ariana's softball team has won the division championship 9 times. The number of Lara's softball team's wins is between Tanya's and Ariana's. How many times has Lara's softball team won the division championship? _____
- 7 **CELEBRATIONS** It is Vera's birthday. I know that she is one year younger than my cousin. My cousin is 38. How old is Vera? _____
- 8 **MEETINGS** Pati has a meeting on Thursday of this week. What is Thursday's date? _____

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8	9			Staff Meeting		14

- 9 **PUZZLES** I am a counting number between 21 and 33. I have one digit that is a 9. What number am I? _____

1-2 Practice: Problem Solving

Solve.

- 1 **FUNDRAISERS** Grace, Matt, and Bob each participated in a school fundraiser. Grace sold 50 boxes of cookies. Matt sold 58 boxes of cookies. Bob sold more boxes than Grace but less boxes than Matt. Fill in the table below. How many boxes could Bob have sold? _____

Student	Boxes Sold	Did Grace sell more or less boxes than Bob?	Possible number of Boxes Sold by Bob
Grace			
Matt			

- 2 **FOOD** Lydia baked 30 cookies for the soccer team. Sonia baked 45 cookies for the soccer team. Who baked more cookies for the soccer team? Explain. _____
- 3 **PUZZLES** I am a whole number between 51 and 59. I have one digit that is an 8. What number am I? _____
- 4 **MOVIES** Terrence buys a certain number of movie tickets for himself and his friends. Terrence buys more than 14 tickets but less than 20 tickets. How many tickets could Terrence have bought? _____
- 5 **TEMPERATURE** The high temperature on Monday was 86° Fahrenheit. The high temperature on Thursday was 81° Fahrenheit. On which day was the temperature warmer? Explain. _____
- 6 **BASEBALL** Mr. Hiroshi's team won 22 baseball games last season. If the team wins more games than last year, but only plays 25 total games, how many games is it possible for the team to win? _____
- 7 **AGES** Julian is one year older than Sheila. Sheila is one year older than Eva. If Eva is 6, how old is Sheila and how old is Julian? _____
- 8 **RUNIN** Camille practiced her violin on 14 days last month. If Camille needs to practice more than the number of days she practiced last month, but less than 20 total days, how many days could she practice? _____

1-3 Practice: Problem Solving

Solve.

- 1 **MEASUREMENTS** Dario has one piece of wood that is 10 feet long. He cuts the piece of wood into two pieces. One piece of wood measures 4 feet. How long is the other piece? _____

- 2 **BAKING** Mandy and Kevin baked 18 cupcakes. If Mandy baked 12 cupcakes, how many did Kevin bake? Explain. _____

- 3 **NUMBER SENSE** Write an equation that represents 14 using only 3 numbers. _____

- 4 **INTERIOR DESIGN** Rita's bedroom is 15 feet long. Her bed is 6 feet long and is placed along the wall. How many feet are there between the end of the bed and the wall? _____

- 5 **BASKETBALL** Lorenzo and Ralph scored a total of 22 points in a basketball game. If Lorenzo scored 13 points, how many did Ralph score? Write an equation to represent the points scored in the game. _____

- 6 **AGES** If Paco and Kendra add their ages the total is 17. Write 4 expressions that could represent the sum of their ages. _____

- 7 **MUSIC** The table below shows the number of CDs Neela and Gina each own. Write an equation to represent the total number of CDs they own. _____

Name	# Of CDs
Neela	4
Gina	14

- 8 **PUZZLE** I am a whole number. If you add me to 13 you get 20. What number am I? Write an equation to represent the number _____

- 9 **REFLECT** Explain the difference between an expression and an equation. _____

1-4 Practice: Problem Solving

Solve.

- 1 **NUMBER SENSE** Gwenn wants to write the even numbers between 0 and 12. What numbers should she write? _____
- 2 **PARTY** Yani is having a party with an odd number of guests. If the number of guests is between 14 and 19, what are the possible numbers of guests? _____
- 3 **PUZZLE** I am an even whole number less than 12 and I have two digits. What number am I? _____
- 4 **BASKETBALL** Inez scored the following number of points in the last four games: 26, 20, 14, 8. What is the pattern of Inez's scoring? What is the next number in this pattern? _____
- 5 **FABRIC** Rhonda needs to cut a specific amount of fabric. She needs to cut an even length that is more than Wayne's piece but less than Elisa's piece. If Wayne's piece is 12 yards long and Elisa's piece is 16 yards long, how many yards should she cut? _____
- 6 **AGES** Olivia is 69 years old and Debra is 60 years old. Katie says that her age is an odd number between Olivia's and Debra's age. What are the possibilities for Katie's age? _____
- 7 **MUSIC** The table below shows the number of songs Dante listened to during the week. On which days did Dante listen to an even number of songs? _____

Monday	Tuesday	Wednesday	Thursday	Friday
2	4	5	11	20

- 8 **PUZZLES** I am an odd counting number between 73 and 85. One of my digits is a 3. What number am I? _____
- 9 **DESSERT** Benito is cutting several pies to give out for dessert. He cuts the first pie into 2 pieces. He cuts the second pie into 4 pieces. He cuts the third pie into 6 pieces. What is the pattern that he is using to cut the pies? How many pieces would you expect him to cut the fourth pie into? _____
- 10 **REFLECT** What is the pattern of the following list of numbers: 5, 15, 25, 35? Will the numbers in the pattern continue to be odd? Explain. _____

1-5 Practice: Problem Solving

Solve.

- 1 **NUMBER SENSE** Chase wants to rewrite the expression $4 + 8$ so that the value does not change. How can he rewrite the expression using the Commutative Property?

- 2 **BAKING** Jose wants to make 10 cupcakes. He has already made 6 of them. How many more cupcakes does he need to make? Write an equation to show the amount of cupcakes Jose wants to make.

- 3 **PUZZLE** I am an odd whole number. If you add me to 7 you get 10. Write an equation to show my number.

- 4 **BASKETBALL** Frida and Tavier scored a total of 10 points. If Tavier scored 2 points, how many did Frida score? Write an equation to show the number of points scored by Frida.

- 5 **FABRIC** Ella is cutting a 10 yard piece of fabric into two parts. The first piece is 9 yards long. How long will the second piece be?

- 6 **AGE** Ali wants to add his age to Tara's age. Ali is 10 and Tara is 4. Write two expressions that Ali could use to add the ages.

- 7 **INTERIOR DESIGN** The table below shows the measurements of items in India's bedroom. India wants to add the lengths of all three items. Write three ways that India could write the addition problem.

Item	Length
Bed	10
Night-stand	4
Dresser	8

- 8 **REFLECT** In your own words explain the Commutative Property of Addition.

Practice: Problem Solving

Solve.

- 1 **NUMBER SENSES** Nate wants to rewrite the expression 74 in expanded form and in word form. What should he write? _____

- 2 **PARTY** Kelly is having a party. The number of people coming to the party is shown in the table. In standard form, how many people are coming to the party? _____

	Tens	ones
Standard	2	1
Model		

- 3 **PUZZLES** Use the digits 5 and 8 to make the greatest number. Use each digit only once. _____

- 4 **PUZZLES** Use the digits 2 and 9 to make the smallest number. Use each digit only once. _____

- 5 **HOBBIES** Sandra has 12 figurines. Write how many figurines she has in standard form, expanded form, and word form. _____

- 6 **AGES** Marcel's father is thirty-eight. Write his father's age in standard form and expanded form. _____

- 7 **FUNDRAISER** The table below shows the number of items bought during a fundraiser. Identify the place value for each number. _____

Item	Bought	Tens	Ones
Pizza	22		
Cookie Tins	31		
Flowers	54		

- 8 **PUZZLES** Use the digits 8 and 7 to make the smallest number. Use each digit only once. _____

- 9 **PUZZLES** Use the digits 1 and 6 to make the largest number. Use each digit only once. _____

- 10 **REFLECT** Write 79 in three different ways and identify the form for each. _____

Practice: Problem Solving

Solve.

- 1 **AGES** Marsha has two friends named Alana and Fred. Marsha is 12 years old. Alana is 11 years old. Fred is 13 years old. Marsha tells her friends that her age is between Alana's and Fred's ages. Use a for Marsha's age. Write 2 statements that compare a to the other friends' ages. _____
- 2 **FOOTBALL** On February 5, 2006, the Pittsburgh Steelers and the Seattle Seahawks played in the Super Bowl in Detroit, Michigan. The Pittsburgh Steelers scored 21 points. The Seattle Seahawks scored 10 points. Use the symbol $>$ to write a statement that compares the final scores. _____
- 3 **BANKING** A bank teller is counting the coins that are in her drawer. She stacks the piles of pennies so that it is easier for her to count. Pile A has a total of 22 pennies stacked in piles of 5. Pile B has a total of 34 pennies stacked in piles of 5. Use the $<$ symbol to write a statement that compares the two piles. _____
- 4 **TEMPERATURE** The average high temperature in Los Banos, California in January was 56°F . The average high temperature in Los Banos, California in July was 101°F . Use the symbol $>$ to write a statement that compares the two different temperatures. _____
- 5 **HOBBIES** Three friends collect beanie babies. Arcadia has 25 beanie babies and Margarite has 30 beanie babies. Brigitte has 15 beanies. Arcadia tells her friends that she has more than Margarite but less than Brigitte. Use b for the number of beanies that Arcadia has. Write 2 statements that compare b to the number of beanies that Arcadia's friends have. _____
- 6 **BAKING** In a recipe for making bread, Alfonzo is using 4 eggs. Felix is using a different recipe to make bread. This recipe tells Felix to use 5 eggs. Use the symbol $<$ to write a statement that compares the number of eggs in the two different recipes. _____
- 7 **SHOPPING** Len goes to the department store to a shirt. He found a shirt he likes in 2 different sizes. Shirt number 1 is a Large and shirt number 2 is an Extra Large. Use the $>$ symbol to write a statement that compares the sizes of the two shirts. _____

1-8 Practice: Problem Solving

Solve.

- 1 AGES** A family has 4 children. Coty is 16 years old. Serene is 3 years old. Scott is 8 years old. Ellis is 2 years old. Arrange the children in order of age from least to greatest.

- 2 FOOTBALL** The San Diego Chargers won 9 games during their 2005 season. The table below shows the number of points scored by the Chargers against four of the opposing teams.

Opposing team	Points Scored by the Chargers
New York Giants	45
Kansas City Chiefs	28
New England Patriots	44
Los Angeles Raiders	27

Arrange the teams in order of points scored by the Chargers from greatest to least.

- 3 NUMBER SENSE** Forty-five is between what two groups of ten? Write the three numbers from least to greatest.

- 4 NUTRITION** Maxine is doing a report for her Health class. She has researched the number of Calories in the fast food combo's at several local restaurants. She has found, Restaurant A's combo has 540 Calories, Restaurant B's combo has 490 Calories, Restaurant C's combo has 660 Calories, and Restaurant D's combo has 580 Calories. Arrange the restaurants, according to the Calorie totals, from least to greatest.

- 5 TREES** A farmer was out looking at all of his trees. His apple trees were about 10 feet tall. His peach trees were about 8 feet tall. His orange trees were about 12 feet tall. His pear trees were about 14 feet tall. Arrange the trees in order from the greatest height to the least height.

- 6 MONEY** Julio arranged his coins in 4 piles. There are 25 pennies, 8 nickels, 1 dime, and 4 quarters. Arrange the coins in order from the least number of coins to the greatest number of coins.

Practice: Problem Solving

Solve.

1 PUZZLES Use the digits 5, 2, and 4 to make the smallest possible number. Use each digit only once.

2 PUZZLES Use the digits 1, 8, and 2 to make the greatest number. Use each digit only once.

3 SHOPPING Tito bought a new television, paying cash for the purchase. The television costs \$532. Tito had the following bills in his wallet:



To make the purchase, Tito wants to use the least amount of bills and he does not want any change. What bills will he use to pay?

4 MEASUREMENTS There are 100 millimeters in a decimeter and 10 millimeters in a centimeter. The length of a rope measures 4 decimeters, plus 9 centimeters, plus 5 millimeters. How many millimeters is the length of the rope?

5 BANKING Drew Harrison is writing a check for his car payment to First Bank and Trust. The payment is \$217. To complete the check, he must write the amount in words. Write the number in word form.

6 GAUGES A submarine log requires the depth be recorded in words and digits. What digits are recorded with the depth of seven hundred fifty feet?

7 SCHOOL Seven hundred thirty-two students attend Kim's Elementary School. Write this number in expanded form.

Practice: Problem Solving

Solve.

1 PUZZLES Write a three-digit number, using the digits 4, 6, and 8, that rounds to 800. Use each digit once.

2 NUMBER THEORY Desta has a three-digit number written on a card. Her baby brother tore the card into three pieces – each piece has one number on it. Her brother lost the first piece, but the middle piece had a 5 on it and the last piece had a 7 on it. She remembered that the number rounded to 400. What is the missing number?

3 PUZZLES Emilio wrote a three-digit number on a piece of paper. He said, “My number uses the digits 3, 6, and 5 and rounds to 500. What is my number?” What is Emilio’s number?

4 WEIGHT Keith and Ally brought their dogs to the vet for a check-up. Keith’s dog weighed 127 pounds and Ally’s dog weighed 117 pounds. Which dog is heavier? Write a number sentence to compare the dogs’ weights.

5 SAVINGS Kenya has saved \$297. What is the amount of her savings rounded to the nearest ten?

Use the table to answer questions 6 through 7.

Distance from Sacramento to 4 Major Cities

	San Francisco	Los Angeles	Madera	San Diego
Sacramento	87	386	151	505

6 VACATION Nando’s family lives in Sacramento, California. They are taking a trip to a city that is more than 300 miles and less than 500 miles from their home. Where is Nando’s family visiting?

7 DISTANCE Which city is the greatest distance from Sacramento? What is this distance rounded to the nearest hundreds?

Practice: Problem Solving

Solve.

- 1 **PUZZLES** Use the digits 2, 5, 1, and 8 to make the largest possible 4-digit number. Use each digit once. _____

- 2 **MOVIES** A small video rental store has 200 action DVDs, 70 comedy DVDs, and 5 foreign DVDs. What is the total number of DVDs in the store? _____

- 3 **AGE** Awar noticed that the digit in the hundreds place of his street address is the same as his age. His street address is 2915 Windy Way. What is Awar's age? _____

- 4 **DOWN PAYMENT** Tom and Irene paid six thousand, seven hundred five dollars as a down payment on a new house. What is this amount in standard form? _____

- 5 **PUZZLES** Use the digits 2, 5, 1, and 8 to make the smallest possible number that is odd. Use each digit once. _____

- 6 **RENT** Reggie Hamilton just rented his first apartment. He wrote a check for the first and last months' rent. Complete the check, writing the dollar amount in words. _____

Reggie Hamilton 123 High Street, Santa Cruz, CA 95064		DATE <u>9/14/2007</u> 001
PAYEE <u>Apple Tree Apartments</u>	\$ <u>1,370.00</u>	/00 DOLLARS
BANK • <u>Reggie Hamilton</u>		
⑈001 ⑈12345⑈123⑈ 123456⑈123⑈		

- 7 **FORESTRY** Javier, the owner of a tree farm, planted 50 trees in his first year of business. He planted 800 trees in his second year. Now in his third year, Javier planted 2,000 trees. What is the total number of trees Javier has planted? _____

Practice: Problem Solving

Solve.

1 GAMES Angelo wrote the numbers 4, 3, 9, and 5 on four separate pieces of paper and mixed up the order. He gave two clues: the number rounds to 5,000 and the number is even. What is Angelo's number?

2 NEIGHBORHOOD Kayla lives at 1524 Wild Wood Drive. Oliver lives down the street, at 1516 Wild Wood Drive. If you start at the beginning of the 1500 block of Wild Wood Drive and walk toward the 1600 block, whose house will you get to first?

3 NUMBER SENSE Write two four-digit even numbers using the digits 2, 3, 8, and 9 that when rounded to the *thousands* both equal 3,000. Use each digit once in each number.

4 RIVERS

River	Length in Miles	Length Rounded to the nearest 100 miles
Red	1,290	
Columbia	1,240	
Colorado	1,450	

Complete the chart by writing each river's length rounded to the nearest 100 miles. Then, list the rivers in order from shortest to longest.

5 SKY DIVING Bernardo has started sky diving. On his first jump, he jumped from a distance of 3,875 meters. He jumped from a distance of 4,210 meters on his second jump and a distance of 4,050 on his third jump. Order the jump heights from shortest to longest.

6 NUMBER SENSE How many four-digit odd numbers that round to 5,000 can be written using the digits 2, 4, 5, and 9? Write the numbers.

7 SAVINGS Paige has \$3,426 in her savings account. Write the amount of money Paige has in her savings account rounded to the nearest *thousand* dollars.

Practice: Problem Solving

Solve.

- 1 **PHYSICS** The speed of sound on a spring day is thirteen thousand, five hundred four inches per second. What is this speed in standard form? _____

- 2 **AREA** The drainage basin for the Mississippi-Missouri River System is approximately 1,200,000 square miles. Write this area in word form. _____

- 3 **WRITING** Juanita wrote 7,025,345 in words on her paper. What mistake did Juanita make if she wrote, "seven million, twenty-five, three hundred forty-five"? _____

- 4 **AREA** Australia is the smallest continent in the world. It has an area of 7,617,930 square km. Write the area of Australia in word form. _____

- 5 **GEOGRAPHY** The table shows the highest points in Asia, Africa, and North America.

Location	Height (in feet)
Kilimanjaro – Africa	19,340
Everest – Asia	29,035
McKinley – North America	20,320

What is the height of Everest in word form? _____

Of these three locations, which is the lowest point? _____

- 6 **AGE** Jeremy used a calculator to find his age in minutes. The screen shows 13147200. Write the number in standard form, (with commas), and in word form. _____

- 7 **SPACE** The distance from Mercury to the Sun is thirty-five million, nine hundred eighty-three thousand, six hundred ten miles. Write this distance in standard form. _____

Practice: Problem Solving

Solve.

- 1 **NATURE** A giant panda can eat as much as 30,660 pounds of bamboo in a year. What is this number rounded to the nearest thousand pounds? _____

- 2 **AREA** The water area of the United States is 256,645 square miles. What is this number rounded to the nearest hundred thousand square miles? _____

- 3 **DISTANCE** The distance from Mercury to the Sun is 57,909,175 km. What is this distance rounded to the nearest million kilometers? _____

- 4 **ATTENDANCE** The record attendance for the Los Angeles Coliseum is 134,254. What is this number rounded to the nearest ten thousand? _____

- 5 **WEIGHT** The largest land animal is the elephant. The largest elephant on record was an African male elephant weighing 10,886 kilograms. What was his weight rounded to the nearest thousand kilograms? _____

- 6 **POPULATION** The 2000 population of the United States was 281,421,906. What is this population rounded to the nearest ten million people? _____

- 7 **HIGHWAYS** There are 46,724 miles of highway in the National Interstate System. How many miles are in the interstate system rounded to the nearest ten thousand? _____

- 8 **AREA** The map of the area of each of the Great Lakes is as follows: Lake Superior 31,698 sq mi, Lake Michigan 22,316 sq miles, Lake Huron 23,011 sq mi, Lake Erie 9,922 sq miles, and Lake Ontario 7,320 sq miles. Order the Great Lakes, according to area, from smallest to largest. _____

Practice: Problem Solving

Solve.

- 1 **CEREAL** Annie went to the store to buy cereal. Brand A weighs 425 grams and costs \$2.55. Brand B also weighs 425 grams and costs \$2.05. Which box of cereal is less expensive?
- 2 **CONSTRUCTION** Alonso is building a deck and needs a piece of wood that is 29.63 inches long. He has the piece of wood that is $29\frac{3}{4}$ inches long. Is it long enough? Explain.
- 3 **PHYSICS** Bimisi is testing the water-flow rates of several small water pumps for ice makers in refrigerators. For several pumps, the flow rates are $10.30\text{ mL}\backslash\text{min}$, $10.45\text{ mL}\backslash\text{min}$, $10.18\text{ mL}\backslash\text{min}$, $10.63\text{ mL}\backslash\text{min}$, and $10.32\text{ mL}\backslash\text{min}$. What is the order of the flow rates from least to greatest?
- 4 **ENGINEERING** Opal is designing a motor for a leaf blower. The prototype she makes produces air traveling at a speed of 170.42 mph. For the blower to work properly, she needs the air to travel at a speed of $170\frac{1}{2}$ mph. Will her prototype work properly? Explain.
- 5 **EGGS** Chang is weighing eggs to determine if they can be classified as *large* or *extra large*. He finds the weights of the six eggs below. What is the order of the egg weights from least to greatest?



- 6 **HEIGHT** Meda and her friends want to know who is the tallest. They measure their heights individually and share the results. Meda is 66.3 inches tall, Doris is $66\frac{1}{2}$ inches tall, Molly is 64.7 inches tall, and Fatima is $64\frac{3}{4}$ inches tall. Put the heights of the friends in order from least to greatest.
- 7 **RUNNING** Roman is training for a marathon. Last week Roman ran $5\frac{1}{2}$ miles on Monday, 4.2 miles on Tuesday, 5.4 miles on Wednesday, and $5\frac{3}{4}$ miles on Thursday. On which day did Roman run the most?

Practice: Problem Solving

Solve.

- 1 **COOKING** Lupe uses 4 cups of flour to make one loaf of bread. She uses another 4 cups to make another loaf. How much flour does she use? _____
- 2 **PUZZLES** Use the digits 3 through 7 to write five 3-digit numbers so that the digits have a sum of 15. _____
- 3 **SPEED** Neil is driving to the mall at 34 miles per hour. He increases his speed by 8 miles per hour. What is Neil's new speed? _____
- 4 **BASKETBALL** A basketball team scored 43 points in the first half and 45 points in the second half. What was their total score? _____
- 5 **TRAVEL** Isabella is driving to her grandmother's house. She drove 105 miles, then stopped to get gas. Then she drove 241 miles more and arrived at her grandmother's house. How many miles did Isabella drive? _____
- 6 **MAGAZINES** Dr. Larson has 8 magazines on one table in his waiting room. There are 7 magazines on a second table. How many magazines are in the waiting room? _____
- 7 **MOVIES** Jarvis bought two DVDs. One cost \$24 and the other cost \$9. How much did Jarvis pay? _____
- 8 **CYCLING** Marnie biked one route that was 37 km. Then she biked another route that was 41 km. How far did she ride in all? _____
- 9 **SHOPPING** Lucy bought a TV for \$265 and a camera for \$134. How much did she spend? _____

Practice: Problem Solving

Solve.

- 1 **RUGS** Oleta has two rugs that she uses as runners down a long hallway. Each rug is 7 feet long. If she places the rugs end to end down the hallway, what total length can the two rugs cover?

- 2 **NUMBER SENSE** Use the digits 1, 2, 3, 4, 5, 6, and 7 to create three-digit numbers that have a sum of 18. Find the greatest and least of these numbers. What is their sum?

- 3 **GAMES** The boxes show Greta's moves in her last two turns.



How many total spaces did Greta move?

- 4 **FOOTBALL** A team scored 17 points in the first half of the game and 26 points in the second half. How many points did the team score?

- 5 **PACKAGES** Marcus is carrying two packages up a flight of stairs. One package weighs 15 pounds. The other package weighs 7 pounds. What is the total weight of the packages?

- 6 **PURCHASING** Lance bought a TV for \$506 and DVD player for \$128. What is the total price of Lance's purchase?

- 7 **TRAVEL** The Sato family drove 127 miles before lunch, and then drove the remaining 266 miles afterwards. How many total miles did the Sato family travel?

- 8 **NEWSPAPERS** Esteban delivers 126 newspapers every day. Arturo delivers 206 newspapers every day. How many newspapers do they deliver?

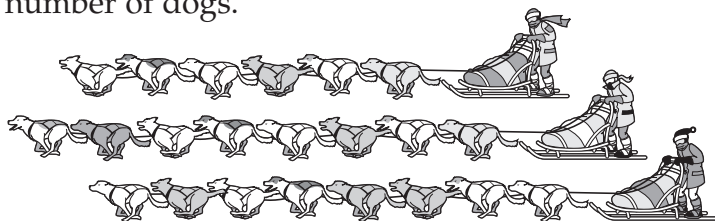
- 9 **BASKETBALL** The final score of the game was 107 to 86. How many points did the two teams score in all?

Practice: Problem Solving

Solve.

- 1 **POLICE** A city police department currently has 38 officers on the force. Changes in the city budget allow for 4 new police officers to be added to the force next year. How many police officers will be in the department next year?

- 2 **DOG SLEDDING** Three friends have decided to hold a practice run for their dog sled teams. How many total dogs did the friends take on the practice run? Write and solve an expression to find the total number of dogs.



- 3 **PIGS** A farmer had three sows which gave birth to piglets in the same month. The first sow had a litter of 9 piglets, the second had a litter of 9 piglets, and the third had a litter of 7 piglets. How many piglets were on his farm?

- 4 **BIRDS** A flock of birds has 48 birds in the summer. In the winter, the flock is joined by 39 more birds. How many birds are in the flock in the winter?

- 5 **BARBEQUE** A restaurant serves barbeque on Fridays and Saturdays. Last weekend, the restaurant sold 308 pounds of barbeque on Friday and 392 pounds of barbeque on Saturday. How much barbeque did the restaurant sell last weekend?

- 6 **ELEPHANTS** A zoo has a baby elephant in its small herd. The baby elephant was born at a weight of 194 pounds. It will gain approximately 750 pounds during its first year. What will be the elephant's approximate weight at 1 year of age?

- 7 **MOWING** Kelvin has a landscaping business. With his small tractor he mowed 138 acres in the first week of the month and 149 acres in the second week. How many acres had Kelvin mowed by the end of the second week of the month?

Practice: Problem Solving

Solve.

- 1 **TOYS** A toy store had an inventory of 5,084 toys on October 31st. On November 1st, the store received a shipment of 4,874 toys. How many toys are now in its inventory? _____

- 2 **CONCERT** The advance sales for a musical concert were 12,790 tickets. The day of the concert, 781 more tickets were sold. What was the total number of tickets sold to this musical concert? _____

- 3 **FIRES** The National Interagency Fire Center maintains statistics on wildfires in the United States. Approximately how many fires occurred in the 5-year period from 2002 to 2006? _____

Year	Number of Fires
2006	96,147
2005	65,440
2004	65,510
2003	63,269
2002	73,423

- 4 **FIRES** In 1999, the Kirk Complex fires in California lasted almost three months and caused damage to 86,700 acres. The Cedar fire in California in 2003 caused damage to 188,300 acres more than the Kirk Complex fires. How many acres were damaged by the Cedar fire of 2003? _____

- 5 **BOOKS** A small bookstore had an inventory of 2,986 books. The owner decided to create a Travel section in the bookstore and purchased 175 books to fill this section. How many books are currently in the owner's book inventory? _____

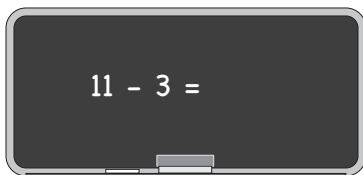
- 6 **HIPPOPOTAMUS** A hippopotamus born at a weight of 84 pounds gained 2,977 pounds by the time it was full grown. What was the adult weight of this hippo? _____

- 7 **GORILLAS** A zoo has three adult gorillas, 2 females and 1 male. The adult male gorilla eats 6,275 pounds of food each month. Each of the adult female gorillas eats 4,150 pounds of food each month. How much food is required each month to feed these three gorillas? _____

Practice: Problem Solving

Solve.

- 1 **NUMBER SENSE** Mr. Wilson wrote a problem on the blackboard for his class to solve. One of his students, Fina, thinks the answer is 8. What fact family equation can Fina use to check her result? Is she correct?



- 2 **LOAN** Dylan's best friend needs a loan. Dylan has \$15. He must keep \$4 in order to buy lunch later that day. How much can Dylan loan to his friend?
- 3 **TRAVEL** The Cruz family plans to attend a Saturday evening wedding which is being held in a city that is 372 miles away from their home. They will travel 170 miles on Friday and spend the night at a friend's house before completing the trip on Saturday. How many miles remain to travel on Saturday to attend the wedding?
- 4 **BUILDING SET** Ramiro purchased a new building set containing 78 pieces that is part of a series he collects. His little sister removed some pieces before he starting building, leaving him with 65 pieces. How many pieces did Ramiro's sister take?
- 5 **BAKING** Toya is baking pies to take to the school bake sale. She needs a total of 12 cups of sugar to make the pies. She measured 9 cups of sugar before she ran out. How many cups of sugar does Toya need in order to complete her baking?
- 6 **MOVIES** Carolina has seen 28 movies this year. While she enjoys all types of movies, she likes science fiction movies best. She has seen 16 science fiction movies this year. How many of the movies Carolina has seen this year are *not* science fiction movies?

Practice: Problem Solving

Solve.

- 1 **RECYCLING** Frank has collected 84 cans to take to the recycling center as part of a school project. His sister, Faith, has collected 153 cans for the project. How many more cans did Faith collect than her brother?

- 2 **BOOKS** A bookstore purchased 275 books for the winter season. If the store sold 258 of these books by springtime, how many of these books remain in the store's inventory?

- 3 **SCRAPBOOK** Rama has 15 pictures of her birthday party to place on a two-page spread in her scrapbook. She placed 8 pictures on the left page of the spread. How many pictures remain to be placed on the right page of the spread?

- 4 **STATE PARKS** There are 277 California state parks. To write a new travel guide for these state parks, Marco wants to visit each of them. If he visits one park each day of the year (assume a year with 365 days), how many days will Marco not visit one of California's state parks?

- 5 **BOWLING** Andre and his friends went bowling. At each frame, 10 pins are set up in the shape of a triangle and the bowler tries to knock down as many as he or she can in two tries. Andre had 2 pins remaining to try and knock down in his second shot. How many did he knock down in his first try?

- 6 **DEER** The California Deer Association maintains records on state big game. According to the association, the number of points on the largest non-typical (having non-symmetrical antlers) mule deer was 27 points on one side. If Placida spotted a mule deer with 32 points on one side, how many more points did it have than the record largest such deer?

- 7 **AMUSEMENT PARK** The Santa Cruz Beach Boardwalk advertises that it has 35 rides and attractions. Lucas and his brother Rodrigo are planning to visit the amusement park and want to visit each of them. If they take 19 different rides before lunch, how many rides and attractions must they visit after lunch to see them all?

Practice: Problem Solving

Solve.

1 EDUCATION According to the 1990 Census, there were 1,995 persons 18 years and over who did not have a high school diploma in Modoc County. There were 2,402 persons 18 years and over who were high school graduates (or equivalents). How many more persons had a high school diploma than did not in Modoc County?

2 AGE Joseph was born in the year 1968. What was his age on his birthday in the year 2006?

3 CALCULATOR Tyra entered the number 3,702 into her calculator, but transposed two of the numbers. If Tyra switched the ones and hundreds digits when entering the number, what was the actual number? How much did the value change by this mistake?

4 FARMS In 1992, the average size of a farm in Sierra, California was 1,046 acres and the average size of a farm in San Bernardino, California was 779 acres. How much larger was the average farm in Sierra than the average farm in San Bernardino?

5 LIBRARIES In 1990, there were 839 libraries in California (excluding school libraries). By the year 2000, there were a total of 1,000 libraries in California. How many more California libraries were there in the year 2000 than in 1990?

6 ARMED FORCES The table below provides information on the number of Californians from different areas of the state who were serving in the armed forces in 1990. How many more males than females from Contra Costa were serving in the Armed Forces?

	Male	Female	Total
Contra Costa, CA	2,640	204	2,844
Mendocino, CA	109	0	109
Napa, CA	122	28	150
San Mateo, CA	600	62	662
Santa Cruz, CA	226	74	300

7 ARMED FORCES Refer to the table in problem 6. Of people serving in the Armed Forces in 1990, how many more were from Santa Cruz than from Mendocino?

Practice: Problem Solving

Solve.

- 1 **MILEAGE** Mr. Singh traveled 42,074 miles last year for business. Mrs. Singh traveled 28,946 miles last year for her business. How many more miles did Mr. Singh travel than his wife? _____
- 2 **ELEPHANTS** A zoo has two different kinds of elephants, African elephants and Asian elephants. If an African elephant weighs 11,947 pounds and an Asian elephant weighs 9,407, how much heavier is the African elephant than the Asian elephant? _____
- 3 **WEBSITE** A new website received 428 hits in its first month. In its second month the website received 1,804 hits. How many more hits did the website receive in the second month than in the first month? _____
- 4 **AIR TRAVEL** The distances by air from Los Angeles to New York and from Los Angeles to Panama City are shown on the map. Which city is further from Los Angeles and how much further? _____



- 5 **DELIVERY** Oliver and Audrey both work for a shipping company. Oliver worked the first shift of the day and noted that 4,482 packages had been delivered so far that day. Audrey worked the second shift of the day and noted that a total of 7,106 packages had been delivered. How many packages were delivered on Audrey's shift? _____
- 6 **PARKS** A state park's annual record number of visitors was 78,340. If the state park had 69,733 visitors by the end of November, approximately how many visitors must come to the state park in December to beat the record? _____
- 7 **IRRIGATION** A putting green needs 28,846 gallons of water for new turf. Established turf needs only 9,615 gallons of water each week. How much more water is required each week for the new turf? _____

Practice: Problem Solving

Solve.

- 1 **PHOTOGRAPHS** Maria is putting pictures in a photo album. She puts 4 rows on each page. Each row contains 2 photos. How many pictures can she fit on one page? Write a multiplication expression to show how you found the answer. _____
- 2 **FOOD** Peter drinks 3 glasses of milk each day. What multiplication expression can be used to find the number of glasses of milk Peter drinks in 1 week? _____
- 3 **INTERIOR DESIGN** Mr. Alberto is placing tiles on one kitchen wall. Each tile is 1 foot wide and 1 foot long. The length of the wall is 10 feet and the width is 8 feet. How many tiles does Mr. Alberto need to cover the wall? _____
- 4 **PACKAGING** A package of muffins contains 6 muffins. Mia bought 5 packages of muffins. How many muffins did she buy in all? _____
- 5 **EXERCISE** At a karate studio, the floor is covered with rectangular mats. There are 9 rows of mats and each row contains 5 mats. Write two multiplication expressions that can be used to find the total number of mats. How many mats are there in all? _____
- 6 **INTERIOR DESIGN** A hotel owner is putting new carpeting in each room of his hotel. There hotel has 5 floors. Each floor has 8 rooms. How many rooms are in the hotel? _____

Practice: Problem Solving

Solve.

1 MONEY Jeremiah saved \$5 each month for 10 months. How much money did he save in all?

2 EXERCISE Dee biked 10 miles each day for the last 9 days. How many miles did she bike during the last 9 days?

3 PACKAGING Manny bought 3 cartons of Sunny Side Up Eggs. Each carton of these eggs contains 12 eggs. Marla bought 4 cartons of Yolks on You Eggs. Each carton of these eggs contains 10 eggs. Who bought more eggs?

4 PACKAGING Sam is having a party. He bought 10 packages of oatmeal cookies and 3 packages of peanut butter cookies. Each package of oatmeal cookies has 5 cookies. There are 10 cookies in each package of peanut butter cookies. What is the total number of cookies Sam bought?

5 AGE Tim is 10 times older than his sister. If his sister is 2 years old, how old is Tim?

6 MONEY Sela has 12 ten-dollar bills. How much money does she have in all?

7 GARDENING Tomas planted 21 pepper plants in his vegetable garden. If each plant produces 4 peppers, how many peppers will there be in all?

8 FOOD Mrs. Carson bought 4 boxes of the cereal. Each box of cereal weighs 12 ounces. How many ounces of cereal did she buy?

Practice: Problem Solving

Solve.

- 1 **AGE** Leon's mother is twice as old as Leon. If Leon is 21, how old is his mother? _____

- 2 **BICYCLES** The Benson family owns 7 bicycles. How many wheels are there in all? _____

- 3 **PETS** Danny wants to build a doghouse which is double the width of the old doghouse. The old dog house is 19 inches wide. How wide will Danny's doghouse be? _____

- 4 **WEATHER** It rained twice as many days in April as it did in May. If it rained 8 days in May, how many days did it rain in April? _____

- 5 **SHOPPING** A carton of lemonade contains 64 fluid ounces. Abigail bought 2 cartons of lemonade. How many fluid ounces of lemonade did she buy in all? _____

- 6 **EXERCISE** Mrs. Johnson walks 2 miles each day. What is the total number of miles she walks in 31 days? _____

- 7 **MONEY** Sela has 44 dimes. If she trades the dimes for nickels, how many nickels will she have? _____

- 8 **SHOPPING** Debbie bought twice as many books as Maria. Carla bought twice as many books as Debbie. Maria bought 4 books. How many books did Carla buy? _____

- 9 **MOVIES** Theo rented 2 movies each week for a year. There are 52 weeks in a year. How many movies did he rent in all? _____

- 10 **DECORATING** Candles come in packs of 2. Charlene bought 5 packs of candles. How many candles did she buy in all? _____

Practice: Problem Solving

Solve.

- 1 **MOVIES** A group of 5 friends went to the movies. Each movie ticket costs \$9. How much did the group spend on tickets? _____

- 2 **EXERCISE** Michele jogs 5 miles each day. How many miles does she run in 14 days? _____

- 3 **SAVINGS** Marla saved \$5 each month for 12 months. Pedro saved \$11 each month for 5 months. Who saved the greater amount of money? Show your work. _____

- 4 **SHOPPING** Mrs. Dawson bought 5 of the T-shirts that had a price tag showing \$10.50. What is the total amount of money she spent on the T-shirts? _____

- 5 **COMMUNTING** Mr. Washington drives a total of 16 miles to and from work each day. How many miles does he commute in a 5-day work week? _____

- 6 **MAPS** The distance between two cities on a map is 2 inches. If each inch on the map equals 5 miles, what is the actual distance between the two cities? _____

- 7 **READING** Sharona read 5 books each month for a year. How many books did she read in all? _____

- 8 **FOOD** The Nelson family ordered 5 tacos and 5 medium drinks. Tacos are \$2.00 each and medium drinks are \$1.00 each. What was the total cost of the meal? _____

- 9 **SUPPLIES** Pencils come in packs of 5. Lydia bought 3 packs of pencils. How many pencils did she buy in all? _____

Practice: Problem Solving**Solve.**

- 1 **SHOPPING** Chandra bought 3 cans of the cat food. Each can costs \$0.59. How much did she spend on cat food? _____
- 2 **EXERCISE** Betty walks 3 miles each day. How many miles does she walk in 31 days? _____
- 3 **AGE** Kenneth is three times as old as Julio. Julio is twice as old as Mae. Mae is 6. How old is Kenneth? _____
- 4 **TICKETS** Perry bought 3 upper deck tickets to a baseball game. They cost \$9.00 each. What is the total amount of money he spent for the tickets? _____
- 5 **RECREATION** A park ranger wants to triple the number of bird feeders in the park. There are 16 bird feeders in the park now. How many bird feeders will there be if that number is tripled? _____
- 6 **WEATHER** It snowed three times as many days this winter as it did last winter. Last winter it snowed on 8 days. How many days did it snow this winter? _____
- 7 **READING** Penny read 3 books each month for 6 months. Carole read 7 books each month for 3 months. Who read the greater number of books? Show your work. _____

- 8 **FOOD** Hal bought 3 packs of tomatoes. Each pack contained 3 tomatoes. How many tomatoes did he buy? _____

Practice: Problem Solving

Solve.

- 1 CELEBRATIONS** Emily bought 4 packages of the party hats. Each package contains 8 hats. She invited 28 people to her birthday party. Will she have enough hats if everyone invited comes to the party? Explain your answer.

- 2 SEATING** A bus can seat 4 people in each row. There are 15 rows of seats on the bus. What is the greatest number of passengers who can ride the bus?

- 3 PETS** Cat food is sold in packages of 4 cans. How many cans of cat food are there in 8 packages?

- 4 INVITATIONS** Rita is mailing 22 invitations. Each sheet of stamps holds 20 stamps. How many sheets of the stamps does she need to buy to have enough stamps to mail the invitations? How many stamps will be left over?

- 5 SERVINGS** A 32-ounce bottle of water serves 4 people. How many people will 5 bottles serve?

- 6 GARDENING** Barry planted 4 rows of pepper plants with an equal number of plants in each row. There are 20 plants in all. How many pepper plants are in each row?

- 7 EARNINGS** Theo earns \$4 an hour at his job. This week he worked 18 hours. How much did Theo earn this week?

- 8 BASEBALL** Sam hit 4 times as many home runs as Derek. Sam hit 28 home runs. How many did Derek hit?

Practice: Problem Solving

Solve.

- 1 **PACKAGING** *Sunnyside Up Egg Farm* packages some of their eggs in the cartons that hold 6 eggs each. How many cartons are needed to pack 54 eggs?

- 2 **SEATING** Each row in an auditorium contains 25 seats. How many seats are in 6 rows?

- 3 **SHOPPING** There are 4 people in the Dawson family. Each person eats 1 English muffin for breakfast each day for a week. There are 6 English muffins in a package. How many packages of English muffins does Mr. Dawson need to buy to have enough for the week?

- 4 **SERVINGS** A 48-ounce bottle of lemonade serves 6 people. How many bottles are needed to serve 42 people?

- 5 **SPORTS** Baseballs are packaged in a carton that holds 6 balls. A team manager needs to buy 74 baseballs. How many packages will he buy?

- 6 **GARDENING** Keisha and Lawrence each planted tomato plants. Keisha planted 6 rows with 3 tomato plants in each row. Lawrence planted 4 rows with 6 plants in each row. How many tomato plants did they plant in all?

- 7 **HOTELS** A hotel has 6 floors. Each floor has 6 rooms. Each room has 2 windows. How many windows does the hotel have in all?

Practice: Problem Solving

Solve.

- 1 **MOVIES** A group of 7 friends go to the movies. Each person buys a box of popcorn that cost \$2.00. How much does the group spend on popcorn?

- 2 **TIME** It takes Lila 7 minutes to walk from home to school, and 7 minutes to walk from school back home. How much time does Lila spend walking to and from school each week?

- 3 **TELEVISION** A local television station has 7 hours of news programming each weekday. How many hours of news does the station show Monday through Friday?

- 4 **MONEY** Sam has 7 quarters, 7 dimes, and 7 pennies. How much money does he have in all?

- 5 **FOOTBALL** In a football game, a touchdown is worth 6 points and an extra point is worth 1 point. Friday night, the team scored 3 touchdowns and 3 extra points. How many points did they score in all?

- 6 **SEWING** Sandy and Jacob are each making a patchwork quilt. Sandy's quilt has 5 rows with 7 patches in each row. Jacob's quilt has 7 rows with 7 patches in each row. How many patches do they need in all?

- 7 **DECORATING** The manager of an office building is replacing the blinds in each window. The office building has 7 floors and each floor has 22 windows. How many blinds does the manager need to buy?

Practice: Problem Solving

Solve.

- 1 **SHOPPING** Bryan bought 8 packs of the raisins that cost \$0.69 each. How much did he spend in all? _____

- 2 **AGES** Diana is 8 times as old as Lars. Lars is 3 years old. How old is Diana? _____

- 3 **COMMUNITY SERVICE** Janelle is making flyers for a canned food drive. She wants to give every house in her community 1 flyer. There are 8 streets in her community and each street has 22 houses. How many flyers does Janelle need to print? _____

- 4 **PACKAGING** Gail bought 8 bottles of water. Each bottle contains 16 fluid ounces. There are 16 fluid ounces in a pint, and there are 2 pints in a quart. How many quarts of water did Gail buy? _____

- 5 **BAKING** Kathy made 8 trays of cookies. Each tray holds 20 cookies. How many cookies did she make in all? _____

- 6 **MONEY** Len has 8 dimes, 8 nickels, and 8 pennies. How much money does he have in all? _____

4-10 Practice: Problem Solving

Solve.

- 1 **SAVINGS** Jerome is saving for a digital camera. The camera costs \$155. He saved \$16 each week for 9 weeks. Did Jerome save enough money to buy the camera? Explain.

- 2 **EWELRY** Kate is making beaded bracelets to sell at a craft fair. She wants to make 35 bracelets. How many beads does Kate need to buy if each bracelet is made with 19 beads?

- 3 **COMMUTING** Mrs. Lee drives 44 miles round-trip to work each day. She works 19 days in December. How many miles does Mrs. Lee drive to and from work in December?

- 4 **GARDENING** Matilda bought 32 packs of the tomato plants. Each pack has 9 tomato plants. How many tomato plants did she buy?

- 5 **KNITTING** Raquel is knitting a rectangular scarf. So far she has knitted 10 rows. Each row of the scarf contains 59 stitches. If Raquel knits 129 rows in all, how many total stitches did she knit?

- 6 **SCHOOL** In a classroom, there were 28 students who are 9 years old. How many total years have the students been alive?

4-11 Practice: Problem Solving

Solve.

- 1 **MEASUREMENT** A *gross* is equal to a dozen dozen, or 12 times 12. A hotel manager ordered 3 gross of light bulbs. How many light bulbs did she order in all? _____

- 2 **DECORATING** Eric is decorating his deck for a party. He is hanging strings of lights that have 12 lights on each string. If he hangs 9 strings of lights, how many lights are there in all? _____

- 3 **MONEY** José saved \$25 each month this year. How much did he save in all? _____

- 4 **NUTRITION** A bag of corn chips contains 15 servings. Each serving is about 11 corn chips. About how many chips are in the bag? _____

- 5 **FOOD SERVICE** The price of a large pizza is \$11.00. Today the Pizza Place sold 129 large pizzas. How much money did they make from the sale of large pizzas? _____

- 6 **EXERCISE** Lance biked 12 miles per day for 22 days. Rosa biked 11 miles per day for 24 days. Who biked the greater number of miles? Explain how you found your answer. _____

- 7 **PACKAGING** A package of crackers contains 12 crackers. There are 8 packages of crackers in a box. How many crackers are there in all? _____

4-12 Practice: Problem Solving

Solve.

- 1 **RESTAURANT** Mr. Agosto's restaurant has 2 large tables for bigger groups of people. The tables are big enough to accommodate 4 people on each side. How many people can sit at each of the big tables?

- 2 **CHEMISTRY** Pari made a hydrogen chloride solution in her chemistry lab. She poured the 10 mL of solution into each of 10 test tubes. How many mL of hydrogen chloride did Pari make?

- 3 **PUZZLES** Write a number whose perfect square is the same as its base.

- 4 **MOVIES** Lucas and six of his friends went to the movies. Each of their tickets cost \$7. What was the total cost of the tickets?

- 5 **DECORATING** Mapiya is putting tiles in her remodeled bathroom. Each tile is 1" by 1". The tiles come connected in 1-square-foot sheets. Since there are 12 inches in 1 foot, how many tiles are in each sheet?

- 6 **CELEBRATIONS** Toya is having a party at her house. She plans to use 9 vases of fresh flowers for decoration. She wants to put 9 flowers in each vase. How many flowers will she need to buy?

- 7 **BABYSITTING** Lucas is babysitting next door. He charges \$6 per hour. The parents said that they would be gone for 6 hours. How much can Lucas expect to earn?

- 8 **PAINTING** Noah is going to paint one wall in his bedroom. The wall is 8 feet wide and 8 feet high. He bought 1 quart of paint. The label says that the can of paint will cover 100 ft². Does Noah have enough paint? Explain.

4-13 Practice: Problem Solving

Solve.

- 1 **CHEMISTRY** Darnell ordered 16 boxes of test tubes for his chemistry lab. Each box contains 65 test tubes. How many test tubes did Darnell order? _____

- 2 **FLOWERS** Jeremy owns a flower shop. On Valentine's Day he sold 74 bouquets with a dozen roses in each bouquet. How many roses did Jeremy sell on Valentine's Day? _____

- 3 **RUNNING** Dakota has been preparing for a marathon for the past 18 weeks. She has run 23 miles each week. How many miles has Dakota run during her training? _____

- 4 **TRAVEL** Zach is driving from Los Angeles to New York City. He has driven for 29 hours and his average speed is 59 mph. How many miles has Zach driven? _____

- 5 **EMPLOYMENT** Ivan has a summer job as a painter. He makes \$23 per hour. On Monday Ivan worked 7 hours, on Tuesday 8 hours, on Wednesday he worked 7 hours, on Thursday 7 hours, and on Friday Ivan worked 7 hours. How much did Ivan make last week? _____

- 6 **TYPING** Leah can type 65 words per minute. Her boss asked her to estimate how many words were in a report she just typed. The report took Leah 15 minutes to type. Approximately how many words are in the report? _____

- 7 **BAKING** Amelia owns a bakery. Every Tuesday she bakes 14 batches of cookies. Each batch makes the same number of cookies. If 1 batch makes 36 cookies, how many cookies does Amelia bake every Tuesday? _____

- 8 **SCHOOL** The principal has set a goal for each homeroom class in the school to sell 134 tickets. The school has 28 homeroom classes. What is the goal of total raffle tickets to be sold for the whole school? _____

Practice: Problem Solving

Solve.

- 1 **GROCERY** Ice Cream is on sale 3 for \$12. How much does one container of ice cream cost? _____
- 2 **TECHNOLOGY** Rashid has 24 Mb of free space on his MP3 player. The songs he puts on it usually take up 3Mb of space. How many more songs can Rashid put on his MP3 player? _____
- 3 **EMPLOYMENT** Bill works 40 hours each week. He works the same number of hours, 4 days a week. How many hours does Bill work each workday? _____
- 4 **RESTAURANT** Tania and 5 of her friends go out to lunch. The final bill including tax and tip is \$48.00. They decide to split the bill evenly. How much does each person owe? _____
- 5 **WOODWORK** Wapi needs to make 4 legs for a small stool. If he uses this entire 48" dowel to make the 4 legs, how long is each leg? _____
- 6 **FOOTBALL** Emilio ran the ball 7 times for 35 yards. Each time he ran for the same number of yards. How many yards did he carry the ball each time? _____
- 7 **FARMING** Ruby is designing an egg flat to hold eggs produced at a farm. She wants the flat to hold 56 eggs with 7 eggs in each row. How many rows does the egg flat need to have? _____
- 8 **COUNTING** Betty wants to know how many floors there are in her friend's apartment building. There are 48 windows on one side of the building with 8 windows per floor. How many floors are there on this building? _____

Practice: Problem Solving

Solve.

- 1 **CHANGE** Lucy has 70 pennies. How many dimes could she trade the pennies for?

- 2 **FLOWERS** Kimiko planted 150 marigolds in rows of 10. How many rows did she plant?

- 3 **TELEPHONES** Felipe wants to know how much time he spends per phone call on his cell phone. On Monday, he made 10 phone calls and talked for a total of 40 minutes. How many minutes can he assume he spent on each call?

- 4 **TECHNOLOGY** Dave purchased a new MP3 player for \$80.00. He only had \$10 bills in his wallet. How many of the bills did he need to give the cashier?

- 5 **CLASSROOM** Ms. Anda has 10 blue pencils, 10 red pencils, and 10 green pencils to give to her students. She decided to give the blue pencils to the 10 students wearing blue, the red pencils to the 1 student wearing red, and the green pencils to the 0 students wearing green. How many pencils did Ms. Anda give each student wearing blue? red? green?

- 6 **HARDWARE** Shenequa measured a screw to be 20 millimeters long. If $10 \text{ mm} = 1 \text{ cm}$, how many centimeters long is the screw?

- 7 **BAKING** Oya baked 110 cookies to give to 10 of her teachers. How many cookies did she give each teacher?

- 8 **CHARITY** Ms. Dixon gives money to charities of her choice each year. She is able to donate \$500 this year. This year she is giving to 1 charity. How much does each of her selected charities get this year?

Practice: Problem Solving

Solve.

- 1 **RETAIL** Ren bought a new DVD player that cost \$40. How many 5-dollar bills did Ren give the sales clerk? _____

- 2 **FOOD SERVICE** Sarai and her friend went out for lunch. They decide to each pay an equal share. The restaurant bill was a total of \$22.00. How much does each girl owe? _____

- 3 **BASKETBALL** Tito has scored the same number of points during each of the first 5 basketball games of the year. He has scored 60 points total. How many points has Tito scored during each game? _____

- 4 **TECHNOLOGY** Nikki's hard drive is 30 GB. She wants to partition it into 2 equal parts. What size should Nikki make each part of her hard drive? _____

- 5 **BIOLOGY** LaBron split his cell cultures into 5 new Petri dishes. After preparing the cells, he has 20 milliliters of cell suspension. How many milliliters does he need to add to each new dish? _____

- 6 **COOKING** Sanjay is making pancakes. The recipe card says that he needs 4 cups of flour. He wants to make the batter in 2 batches. How many cups of flour should Sanjay add to each batch? _____

- 7 **MODELS** Jonathan made a model of his car. The car is 15 feet long and 5 times larger than the model car. How long was Jonathan's model? _____

- 8 **EMPLOYMENT** Fala worked 50 hours last week. She worked the same number of hours each day for 5 days. How many hours did Fala work each day? _____

Practice: Problem Solving

Solve.

- 1 **ENTERTAINMENT** Uma and her 2 brothers want to buy a new game together. The game costs \$27.00. How much does each sibling need to contribute to buy the game? _____

- 2 **NUTRITION** Amanda is only allowed to eat 21 grams of fat each day. If she eats an equal number of grams at each of her 3 meals, how many grams of fat can she eat at lunch? _____

- 3 **SAFETY** Mato and 3 of his friends are in an elevator. The elevator sign says that the maximum weight allowable is 800 pounds. If the weight is split evenly among the friends, what is the maximum allowable weight of each of the people in the elevator? _____

- 4 **WOODWORK** Jamal is going to make a table with 3 legs. The piece of wood that he wants to use to make the legs is 12 feet long. What is the longest length Jamal can make each leg? _____

- 5 **MANUFACTURING** The Clean Machine plant makes 33 washing machines each day. Each of the 3 shifts produces the same number of washing machines. How many machines does each shift make at the Clean Machine plant? _____

- 6 **INTERIOR DESIGN** Lydia is going to make curtains for each of 4 windows. She has 32 yards of fabric. How much fabric does Lydia have for each curtain? _____

- 7 **RETAIL** Rai goes to a clothing store. The store is having a $\frac{1}{3}$ off sale. She finds a shirt she wants to buy for \$24.00. How much will Rai save? What will be the sale price of the shirt? _____

- 8 **INDUSTRY** An assembly line can make 12 toy trains per hour. If 3 people pack the trains, how many does each have to pack to keep up with the assembly line? _____

Practice: Problem Solving

Solve.

- 1 **FUNDRAISING** Toru sells tins of popcorn to raise money for the school band. Each tin of popcorn sells for \$7. He has raised \$854 so far. How many tins of popcorn has he sold? _____

- 2 **EMPLOYMENT** Kwam works for a landscaping company. He works 36 hours per week. If he decides to split his time equally over 6 days, how many hours should Kwam work each day? _____

- 3 **FITNESS** Ines has been working out every day for the past 49 days. How many weeks has Ines been working out? _____

- 4 **GROCERY** Dean has been stacking egg flats into boxes. Each box will hold 6 egg flats of 30 eggs. He was told to load 192 egg flats in a shipment for a local grocery store. How many boxes should Dean load onto the truck for this shipment? _____

- 5 **CELEBRATION** A group of 8 people went out to lunch for Chantal's birthday. Seven of them decided to treat Chantal to lunch. The total restaurant bill was \$63.00. How much does each person owe? _____

- 6 **MAINTENANCE** Trevor needs to make sure there is enough cleaning solution to run a processing machine. He has 3 10-liter bottles of cleaning solution. The machine uses 6 liters of cleaning solution every day. How many days can Trevor run the machine before he runs out of cleaning solution? _____

- 7 **TRAVEL** Gen is driving from Atlanta, Georgia to Salt Lake City, Utah. She estimates it will take her 28 hours to drive this distance. She decides to drive an average of 7 hours per day. How many days will it take Gen to complete her trip? _____

- 8 **BIOLOGY** Sara needs to run tests to determine if the DNA she is looking for is present in her samples. The machine can hold a total of 30 samples in rows of 6. How many samples are in each row? _____

Practice: Problem Solving

Solve.

- 1 **TECHNOLOGY** Chelsea gets paid \$9 per hour. How many hours does Chelsea need to work to buy the MP3 player that cost \$63? _____

- 2 **DOG SLEDS** Shim and his team of sled dogs can run 9 mph in rough winter weather. They need to travel 54 miles. How long will it take? _____

- 3 **EMPLOYMENT** Pearl is working on her time sheet. She has determined that she worked 24 hours last week and 48 hour this week. She always worked 8 hours per day. How many days did she work each week? _____

- 4 **CONSTRUCTION** Anton is making two work tables for his shop. He has 1 long piece of wood that is 32 feet long. He wants to use the piece of wood for all 8 legs. How long will Anton make each of the legs of his tables? _____

- 5 **CELEBRATION** Sarita made 200 ounces of punch for herself and 8 guests. Each person drank the same amount, and as much as they could. How many ounces of punch were left over? _____

- 6 **FURNITURE** It takes Amal 9 hours to make one chair. A customer asks him for a rush order of 6 chairs. He has only 48 available hours to work on this order. Is this enough to satisfy the customer's order? _____

- 7 **MOVIES** Hama and 7 of her friends went to the movies. The total cost of their tickets was \$56.00. How much was each ticket? _____

Practice: Problem Solving

Solve.

- 1 **BUSINESS** Tam needs to make 66 cups of coffee for the meeting. The coffee pot holds 11 cups. How many pots of coffee does Tam need to make? _____
- 2 **COST** Paige uses 1 egg in her bread recipe. If 12 eggs cost 96¢, how much does 1 egg cost? _____
- 3 **FOOTBALL** The coach decides to give all 11 of the starting offensive players nose strips for playing so well the previous week. If the coach has 33 nose strips, how many can he give to each player? _____
- 4 **CONSTRUCTION** Greg is building a deck. He measures a long board he will use as a joist to be 120 inches. Greg notices on his tape measure that 12 inches equals 1 foot. How many feet long is the board? _____
- 5 **TECHNOLOGY** Elias notices that his internet connection has a download speed of 11 Mb/s. He decides to purchase a new type of software online to download onto his computer. The file is 99 Mb. How long will it take Elias to download the file? _____
- 6 **SCHOOL** Kendra figures she has about 22 hours of available time to study for the history final. The test will cover 11 chapters. She decides to spend an equal amount of time covering each chapter. How long should Kendra study each chapter? _____
- 7 **BAKING** Lulu wants to make 72 cookies to give to her friends. She can fit only 12 cookies on the baking sheet at a time. How many sheets of cookies does she need to bake? _____
- 8 **GROCERY** The local grocery store is offering a dozen doughnuts for \$3.60. What is the price of 1 doughnut? _____

Practice: Problem Solving

Solve.

- 1 **TRAVEL** Nicolas is 464 miles from Los Angeles. He wants to reach Los Angeles in 8 hours. How fast does Nicolas need to drive? _____

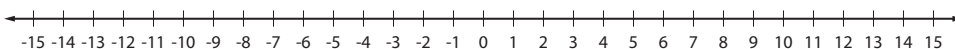
- 2 **SAVINGS** Jun wants to save \$900 over the next 12 months. How much money should she put away each month? _____
- 3 **MEASUREMENT** Teresa and Sonia are identical twins—even their weight is the same. Their combined weight is 218 pounds. How much does each girl weigh? _____
- 4 **SCHOOL** At the beginning of the school year, the principal learns that she will have 189 seventh-graders in her school. She has 7 teachers for the seventh-grade homerooms. How many students should she assign to each seventh-grade homeroom? _____
- 5 **FISH** A new pet store just received their shipment of 198 pet fish. They need to limit the number of fish that they put in each tank to 6 fish. How many fish tanks will the pet store need for their new shipment? _____
- 6 **BAKING** Mr. Wu's bakery used 282 cups of flour for cakes over the past 10 days. Each cake needs 3 cups of flour. How many cakes did Mr. Wu's bakery make over the past 10 days? _____
- 7 **COMMUNITY SERVICE** Five students volunteered for a total of 185 hours at the local hospital. Each of the students volunteered the same number of hours. How many hours did each student volunteer at the hospital? _____
- 8 **ART** Maya made \$378 by selling all 9 of her paintings at the craft fair. Each painting was sold for the same price. What price did Maya sell each of her paintings? _____

Practice: Problem Solving

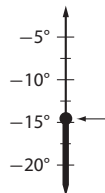
Solve.

- 1 **FINANCES** Molly's bank statement showed an entry of $-\$25.00$ on the 4th day of last month's statement. Did the entry $-\$25.00$ represent a withdrawal or a deposit that Molly made?

- 2 **PUZZLES** Write an odd number that is more than 8 units to the left of zero and less than 11 units from zero.



- 3 **TEMPERATURE** On the Celsius temperature scale, 0°C is freezing. The thermometer below shows the current temperature outside. What is the temperature outside?



- 4 **FOOTBALL** A running back was tackled 3 yards behind the line. What integer represents the number of yards gained by the team for that play?

- 5 **TRAVEL** During summer vacation, Lamar and his family went camping and mountain climbing. The tallest mountain they climbed was 5,746 feet tall. What integer represents the height of the mountain that Lamar climbed with his family?

- 6 **WEATHER** The temperature at 1:00 PM was 65°F . By 8:00 PM, the temperature had dropped 19°F . What was the temperature at 8:00 PM?

- 7 **BANKING** Jody wrote a check for $\$26$. Then she made a deposit into her checking account of $\$35$. What integer represents the net change in the balance of her checking account?

Practice: Problem Solving

Solve.

- 1 **FOOTBALL** During last week's football game, Nantan rushed for +7 yards, +3 yards and -2 yards. What were Nantan's total rushing yards for the game? _____

- 2 **GOLF** During a golf match, Marcel scores +2 (2 over par) on the first hole, +1 on the second hole, -1 (1 under par) on the third hole, and +1 on the fourth hole. What is Marcel's score after the fourth hole? _____

- 3 **TREASURE HUNT** Sachi is searching for buried treasure. The map says to take 25 steps forward from the tree, 10 steps backward, 3 steps forward, and finally 8 steps backward. Where is the treasure from the tree? _____

- 4 **HEALTH** When Joel eats a healthy meal, he gives himself 3 points. When he eats an unhealthy meal, he gives himself -5 points. On Thursday, he ate 2 healthy meals and 1 unhealthy meal. How many points should Joel give himself for that day? _____

- 5 **FINANCES** Maggie received \$25.00 for her birthday. She paid her mother back the \$15 that she had borrowed last week. How much money does Maggie have left? _____

- 6 **BAKING** Elsu made 2 dozen cookies. He gave 8 to his friend, 6 to his mother and 3 to his little sister. Then he baked 15 more cookies. How many cookies does Elsu have? _____

- 7 **GAME** Janet and Sandra made up their own scoring for a game they play with each other. For every shot they make they get 5 points, and for every shot they miss they lose 2 points. Who won the game? Explain. _____

Scoring		
	Janet	Sandra
Shots Made	6	5
Shots Missed	4	2

Practice: Problem Solving

Solve.

- 1 **CONSTRUCTION** Ajay needs to dig a pit 12 inches deep for his new patio. On Monday, he digs an 8 inch hole. During the night it rains and 2 inches of dirt falls back into his pit. How much deeper does he still need to dig? _____

- 2 **FOOTBALL** The home team needs to gain 8 yards for a touchdown. They gain 4 yards, lose 2 yards, and gain 5 yards. How many more yards does the home team need for a touchdown? _____

- 3 **MINING** Maria travels down a mineshaft to 98 feet below sea level. The entrance of the mine is 25 feet below sea level. How far did she travel? _____

- 4 **SHOPPING** Tobias had a \$35 in store credit. After using his credit towards the purchase of a pair of jeans, he still owed the store \$12. What was the cost of the jeans that Tobias purchased? _____

- 5 **TEST** Leticia got her math test back. At the top of the page it said she had 12 points taken away for incorrect answers and she received 3 extra points for getting the bonus question correct. How many points were added or subtracted to get Leticia's final test score? _____

- 6 **FOOD** A local restaurant had 2 dozen eggs when they opened on Wednesday morning. Later they received a delivery of more eggs. Throughout the day, the restaurant used a total of 5 dozen eggs. The restaurant had 8 dozen eggs left when they closed on Wednesday. How many dozen eggs were delivered to the restaurant? _____

- 7 **FINANCES** Rudy earned \$20 babysitting. He borrowed \$35 from his father last week. He gave all of the babysitting money to his dad. What is Rudy's situation now? _____

Practice: Problem Solving

Solve.

- 1 **ENTERTAINMENT** Doris is the manager of a stadium for concerts and sporting events. The stadium can hold 12,500 people. The stadium sold 10,320 tickets for a concert next month. She was just told that 432 tickets were returned because one of the bands was not going to perform at the show. How many tickets are now available for the concert? _____

- 2 **BIOLOGY** Bruno has 3 vials of cells. The first one has 2,500 cells in it, the second one has 1,800 cells in it, and the third one has 3,200 cells in it. Bruno needs 8,000 cells to start a new culture. If he combines the 3 vials of cells, does he have enough cells to start the new culture? Explain. _____

- 3 **TECHNOLOGY** Kara uses flash drives to back up her work. She has a 256 MB flash drive and a 512 MB flash drive. If she has one file that is 74 MB and another file that is 94 MB, how much available space does she have left to save other files on her flash drives? _____

- 4 **FINANCES** Alek Berrera has already saved \$1,235. Yesterday, he withdrew \$232. On Friday, he will deposit his paycheck which is for \$410. What will be the new balance in Alek's savings account? _____

- 5 **QUALITY** Misu is the plant manager for a plant that makes power tools. The assembly lines have made 3,428 power drills this week. The quality assurance department has rejected 305 of these drills. Misu expects the line to make an additional 720 drills. How many drills can Misu expect to ship to customers if all of the additional drills pass the quality inspection? _____

- 6 **SCHOOL** Beng is studying for a history exam on Friday. He decides to read his 684-page textbook to prepare for the exam. Wednesday night, he finishes reading through page 453. How many pages does he have left to read? _____

Practice: Problem Solving

Solve.

- 1 CELL PHONES** Mr. Owada keeps track of his family's cell phone use. Their phone company gives him a monthly allowance of positive minutes to use each month. He adds up his family's use as negative minutes. His daughter said she talked on her phone 9 times last week and each call lasted about 6 minutes. What integer should Mr. Owada record for his daughter's usage this past week? _____

- 2 FINANCES** Leticia gets a weekly allowance from her parents. Her parents allow her to borrow money to be paid back with future allowances. On Sunday, she borrowed money to purchase 3 books that cost \$6 each. What is Leticia's allowance balance? _____

- 3 HEALTH** Mr. Larson lost 2 pounds each week for the past 2 weeks. What will be the overall change in Mr. Larson's weight if he keeps up this rate for 3 more weeks? _____

- 4 SCUBA DIVING** Gabe goes scuba diving and descends at a rate of 20 feet per minute. His diving partner times how long his descent takes. The stop watch shows 5 minutes and 0 seconds. What depth did Gabe dive to in the water? _____

- 5 ENGINEERING** Howie is calculating the power requirements for a machine he is designing. He documents power sources as positive current and devices that draw power as negative current. He has 5 small pumps in the machine that draw 8 amps of current. What integer will Howie use to document the total current of the pumps? _____

- 6 STOCK MARKET** The stock market posted a loss of 10 points during the past week. An analyst said he expects this trend to continue for the next 6 weeks. What does the analyst expect the stock market change be after 6 weeks? _____

- 7 ENVIRONMENT** Haloke records the water level in the lake each week for the city. The water level has dropped 8 inches each week for the past 4 weeks. What has been the total change in the water level for this month? _____

Practice: Problem Solving

Solve.

- 1 **HOBBIES** A hot air balloon descends at the rate of 250 feet per minute. The balloon descends for 4 minutes. What expression represents the change in altitude of the balloon? _____

- 2 **WEATHER** The temperature at 1:00 AM is 15° F. If the temperature falls 3 degrees each hour, what is the temperature at 5:00 AM? _____

- 3 **MILK** Mrs. Johnson bought a gallon of milk. Her three children each drink one 8 oz glass of milk for 5 days. How many fluid ounces of milk are left? (Hint: 1 gallon = 128 fluid ounces) _____

- 4 **PETS** Rosa has 3 cats. Each day, each cat eats 2 meals. At each meal, each cat eats 4 ounces. How many ounces of cat food do Rosa's cats eat each day? _____

- 5 **TRANSPORTATION** There are 2 adults and 3 children in the Davis family. Each person rides the bus 5 times per week. If it costs each adult \$2.50 per ride and each child \$1.00 per ride, how much do they spend in all? _____

- 6 **TRANSPORTATION** An airplane descends at the rate of 500 feet per minute. The plane descends for 5 minutes. What expression represents the change in the plane's altitude during that time? _____

- 7 **PACKAGING** A vending machine is filled on Monday and contains 4 rows of water. Each row contains 18 bottles of water. On Monday, 4 people buy 2 bottles of water and 11 people buy 1 bottle of water. How many bottles of water are in the vending machine at the end of the day on Monday? _____

Practice: Problem Solving

Solve. Explain your answer.

- 1 **WEATHER** The temperature dropped 18°F in the last 6 hours. What was the average rate of change in degrees per hour? _____

- 2 **RECREATION** Forty-eight people are going canoeing. If each canoe contains 4 people, how many canoes does the group need? _____

- 3 **INVESTING** The value of a share of stock has decreased by \$2 over the last 5 hours. What is the average rate of change in dollars per hour? _____

- 4 **AVIATION** An airplane descended 4,000 feet in 8 minutes. What was the average change per minute? _____

- 5 **RECREATION** Sixty-six people are attending a family reunion. If each picnic table seats 6 people, how many picnic tables are needed to seat everyone in the family? _____

- 6 **FOOTBALL** A team lost 25 yards for 5 penalties. What was the average change in the team's position per penalty? _____

- 7 **FINANCE** Jack's stocks lost 18 points in 9 weeks. What was the average rate of points loss per week? _____

Practice: Problem Solving

Solve.

1 PUZZLES What is the missing number in the equation? _____
 $18 \div \underline{\hspace{1cm}} \times 7 = -21$

2 TICKETS Three senior citizens, 12 adults, and 5 children went to an art museum. How much did they spend on tickets? _____

Art Museum Admission	
Adult	\$8
Senior Citizens	\$6
Children	\$4

3 MONEY Carlos saved 100 quarters, 250 dimes, and 200 nickels. He used some of the money to buy a music CD for \$15 and a T-shirt for \$12. How much money does Carlos have left? _____

4 PUZZLES What is the missing number in the equation? _____
 $2^5 \times 1 \div \underline{\hspace{1cm}} \times -2 = -4$

5 FOOD At a pizza parlor, a group of friends ordered 2 large pizzas and 2 medium pizzas. They ordered 6 bottles of water, 5 lemonades, and 3 iced teas. How much did the group of friends spend in all? _____

Pet's Pizza Parlor Menu	
Pizza	Drinks
Large	Water
Medium	Lemonade
Small	Iced Tea