NAME _____ DATE _____

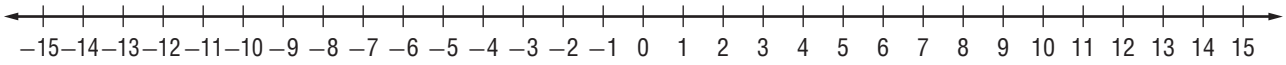
Lesson 1-1

Problem-Solving Practice

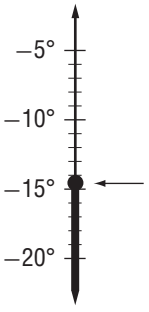
Solve.

1. **FINANCIAL LITERACY** 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 a negative integer that is more than 8 units from zero and less than 10 units from zero. _____



3. **TEMPERATURE** On the Celsius temperature scale, 0° C is freezing. The thermometer at the right 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 change in yards 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 $36. Then she made a deposit into her checking account of $24. What integer represents the net change in the balance of her checking account? _____

NAME _____ DATE _____

Lesson 1-2

Problem-Solving Practice

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 for her birthday. She paid her mother back the $25 that she had borrowed last week. How much money does Maggie have left? _____

6. **SPORTING EVENTS** Beth had $18 when she went to the basketball game. It cost her $5 to get into the game. How much money does Beth have left? _____

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

_____

_____

NAME _____ DATE _____

Lesson 1-3

Problem-Solving Practice

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. What integer describes her change in elevation? _____

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 evening. How many dozen eggs were delivered to the restaurant? _____

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

NAME _____ DATE _____

Lesson 1-4

Problem-Solving Practice

Solve.

1. **CELL PHONES** Mr. Owada tracks his family's cell phone 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's 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 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 maintains this rate for 3 more weeks?

4. **SCUBA DIVING** Gabe is scuba diving. He 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 integer describes Gabe's change in depth?

5. **ENGINEERING** Howie 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 last week. An analyst said he expects this trend to continue for the next 6 weeks. What is the expected stock market change after the next 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?

NAME _____ DATE _____

Lesson 1-5

Problem-Solving Practice

Solve. Explain your answer.

1. **WEATHER** The temperature dropped 18° F in the last 6 hours. How much did the temperature change in degrees per hour if the temperature changed the same amount each 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. How much did the value of a share of stock change in dollars per hour if the value changed the same amount each hour? _____

4. **AVIATION** An airplane descended 4,000 feet in 8 minutes. How much did the airplane's altitude change in feet per minute if the altitude changed the same amount each minute? _____

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

6. **FOOTBALL** A team lost 25 yards for 5 penalties. How much did the team's position change in yards per penalty if the position changed the same amount for each penalty? _____

7. **FINANCE** Jack's stocks lost 18 points in 9 weeks. How much did the value of Jack's stocks change in points per week if the value changed the same amount each week? _____

NAME _____ DATE _____

Lesson 2-1

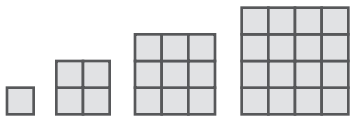
Problem-Solving Practice

Solve.

1. **BANKING** Leo saves $4 each week. How much money does Leo save in 6 weeks? _____

Week	1	2	3	4	5	6
Amount Saved	$4					

2. **DESIGN** Candace created the pattern at the right. How many squares are in the 5th term of the pattern? _____



3. **PIZZA** The Pizza Place sells a large pizza for $7.50. You can buy a second large pizza for $7.25, and a third for $7.00. If this pattern continues, how much would the fifth large pizza cost? _____

4. **VIDEO** Dion rented eight DVDs. Each rental costs $3. How much did Dion spend on all of the DVDs? _____

Number of DVDs	1	2	3	4	5	6	7	8
Cost	$3							

5. **COMMUTING** Mr. Harris drives 12 miles to and 12 miles from work each weekday. After 4 weeks, not including the weekends, how many miles has Mr. Harris commuted to and from work? _____

6. **PACKAGING** Jason bought 6 packages of cookies to share with the students in his grade. If each package contains 15 cookies, how many cookies did Jason buy? _____

7. **INTERIOR DESIGN** Cara is painting the following pattern on her kitchen wall.

If the pattern continues, how many dark triangles are in the sixth term? _____

How many light triangles are in the sixth term? _____

How many triangles are in the sixth term in all? _____

NAME _____ DATE _____

Lesson 2-2

Problem-Solving Practice

Write a function and make a function table.

1 **BIOLOGY** During Biology class, Angie learns that spiders and scorpions each have 8 legs. Let y = the number of legs and x = the number of spiders or scorpions.

$y =$ _____

Number of Spiders or Scorpions, x	4	6	8	10	12
Number of Legs, y					

How many legs do 12 spiders have? _____

2 **WAGES** Sergio works for a company that gives a raise every third year of employment. Sergio was 26 years old when he was hired. Let y = Sergio's age and x = the number of raises.

$y =$ _____

Number of Raises, x	1	2	3	4	5
Serio's Age, y					

How old will Sergio be when he gets his fourth raise? _____

3 **MANAGEMENT** A manager works 1 hour longer each day than his employees. Let y = the number of hours worked by the manager and x = the number of hours worked by the employees.

$y =$ _____

Number of Hours Worked by Employees, x	2	4	6	8	10
Number of Hours Worked by Manager, y					

If the employees worked 8 hours one day, how many hours did the manager work? _____

4 **SAVINGS** Trish is saving money to buy a new CD player. She already has $52 in her savings account and she is saving $4 each week. Let y = the total amount of money she has saved and let x = the number of weeks that she has been saving money.

$y =$ _____

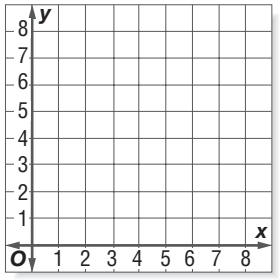
Number of Weeks, x	4	6	8	10	12
Amount of Money Saved, y					

How much money will Trish have saved after 10 weeks? _____

NAME _____ DATE _____

Problem-Solving Practice

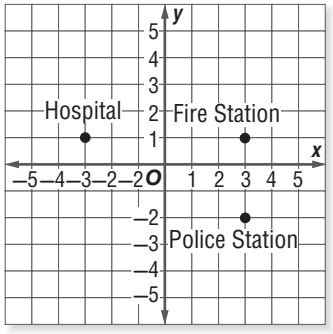
Solve.



1 **CHESS** Della is playing chess. She moves her queen from position (8, 3) to position (1, 3). Graph the points. How many spaces did Della move her queen?

_____

2 **CITIES** Amanda has a map of her hometown. Each square represents one block. Give the coordinates of the Fire Station and the Police Station. How many blocks separate these buildings?

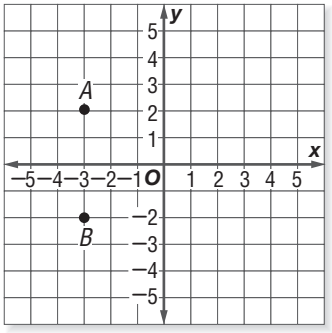


_____

3 **CITIES** Use the map of Amanda's hometown from Exercise 2 above. Give the coordinates of the Hospital and the Fire Station. How many blocks separate these buildings?

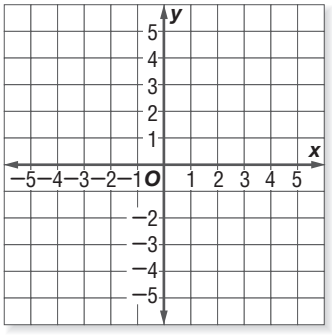
_____

4 **BOARD GAMES** Blake and Juan are playing a military strategy game on a board which has been marked in a grid pattern. Blake attacked at location *A* on his first move and location *B* on his second move. Give the coordinates of each point and the number of spaces between Blake's first and second attacks.



_____

5 **GRAPHING SENSE** Graph the points (−4, 2) and (5, 2) on the coordinate grid shown. What is the distance between these two points? Explain how this distance could be found without graphing the points.



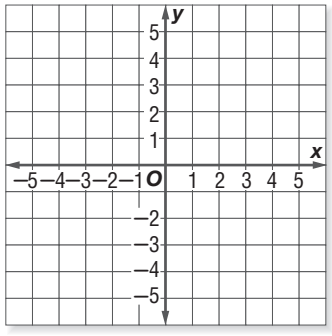
_____

_____

_____

_____

6 **GRAPHING SENSE** Graph the points (3, −2) and (3, −5) on the coordinate grid shown. What is the distance between these two points? Explain how this distance could be found without graphing the points.



_____

_____

_____

NAME _____ DATE _____

Lesson 2-4

Problem-Solving Practice

Solve.

1 **RECREATION** A local festival charges $1 per person plus a parking fee of $5 per car. Make a table to show the relationship between number of people and the total amount charged. How much does it cost for 3 people to drive to the festival in one car?

_____

x	$x + 5$	y	Ordered Pair
1			
2			
3			
4			
5			

2 **PIZZA** Meg hosted a party during which she served pizza. Each person at the party ate 2 slices of pizza. Make a table to show the relationship between the number of people at the party and the total amount of pizza. How many slices of pizza were eaten if 4 people attended the party?

_____

x	$2x$	y	Ordered Pair
1			
2			
3			
4			
5			

3 **MOVIES** Mr. Velez would like to take his kids and their friends to the movies. The matinee price for the movie is $3 each. Make a table to show the relationship between the number of tickets and the total cost. How much will the movies cost if Mr. Velez must pay for himself and 4 children?

_____

x	$3x$	y	Ordered Pair
1			
2			
3			
4			
5			

4 **SAVINGS** Evita has $5 in her savings bank. She wants to save $2 a week to buy some CDs. Make a table to show the relationship between the number of weeks and the total amount saved. How much will she save in 10 weeks?

_____

x	$2x + 5$	y	Ordered Pair
0			
5			
10			
15			
20			

NAME _____ DATE _____

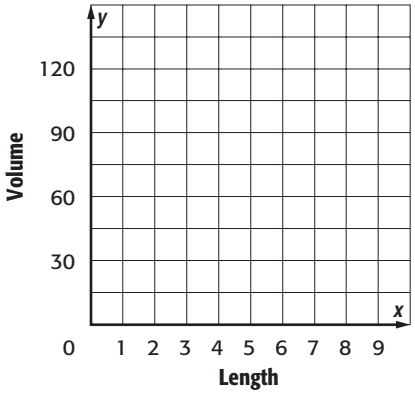
Problem-Solving Practice

Write a function, make a function table, and make a graph.

1 **GEOMETRY** Volume is the amount of space an object occupies. The volume of a cube is the cube of the length of a side.

$y =$ _____

Length, x	1	2	3	4	5
Volume, y					

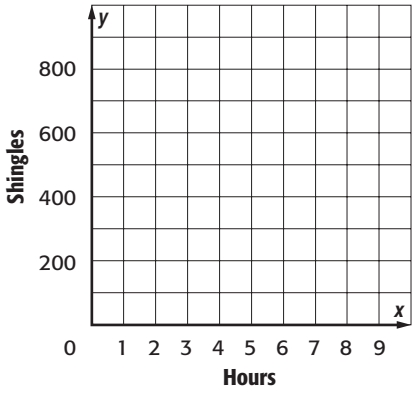


What is the volume of a cube with length 4 units? _____

2 **ROOFING** John is shingling a roof. He has already laid 100 shingles. He can lay 150 shingles each hour.

$y =$ _____

Hours, x	1	2	3	4	5
Shingles, y					

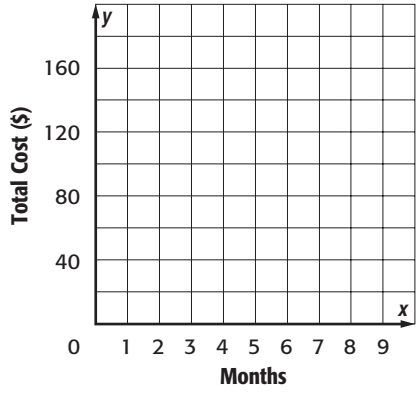


How many shingles will John have laid after 5 hours? _____

3 **MEMBERSHIP** Ian joined a gym. The cost of membership is a one-time fee of $50 plus $10 each month.

$y =$ _____

Months, x	2	4	6	8	10
Total Cost, y					



How much will Ian spend for 6 months of gym membership? _____

NAME _____ DATE _____

Lesson 3-1

Problem-Solving Practice

Solve.

1. **KITTENS** Carla has 2 cats. Each cat had 5 kittens. She found homes for 7 kittens. How many cats and kittens does Carla have left?

2. **BAKERY** A baker made 15 loaves of white bread, 12 loaves of wheat bread, and 10 loaves of rye bread. A customer bought 2 loaves of each of the 3 kinds of breads. How many loaves of bread are left?

3. **EARNINGS** On Monday, Colin worked 3 hours, earned $10 per hour, and spent $5 for lunch. On Tuesday, Colin worked 7 hours, earned $8 per hour, and spent $6 for lunch. How much money does Colin have now?

4. **COOKIES** Shamika baked 60 oatmeal cookies for a bake sale. She divided the cookies equally among 12 bags. At the bake sale she sold 7 bags of cookies. How many cookies does Shamika have left?

5. **COMPUTERS** Emilio received a $15 discount when he bought an ink-jet printer. He also bought 2 black printer cartridges, 1 color printer cartridge, and 5 reams of paper. His receipt is shown below. How much money did Emilio spend?

Computer World

Ink-jet printer	1 @ $125.00
– Discount	–$15.00
Black printer cartridges	2 @ $35.00
Color printer cartridges	1 @ $35.00
Paper	5 @ $5.00

6. **AMUSEMENT PARK** Lalana paid $12 for admission to an amusement park. She rode the roller coaster 3 times and the Ferris wheel 2 times. Each ride cost $2. She also bought a hamburger and 2 lemonade drinks during the day. How much money did Lalana spend?

Lunch Menu

Hot Dog	$2.00
Hamburger	$3.00
French Fries	$1.00
Lemonade	$1.50
Water	$1.00

NAME _____ DATE _____

Lesson 3-2

Problem-Solving Practice

Solve.

1 **EARNINGS** For a typical shift, Alex gets paid \$5 per hour, plus \$3 per hour in tips, and \$40 per shift. The expression $5h + 3h + 40$ represents how much Alex can expect to make during a shift. Determine how much Alex should make if he works a 5-hour shift. _____

2 **ALLOWANCE** Pelipa's parents give her points to determine her allowance. She gets 2 points for taking out the trash (t), 3 points for doing the dishes (d), and 5 points for feeding the dog each day of the week. The expression $2t + 3d + 5$ represents the total number of points she gets in a week. If Pelipa took out the trash once, washed the dishes 3 times, and fed the dog properly, determine the number of points she earned for the week. _____

3 **GARDENING** Sujit was told to use 10 grams of fertilizer for each tomato plant and 8 grams for each pepper plant. The expression $10t + 8p$ represents how much fertilizer should be used. How much fertilizer does Sujit need if he has 2 tomato plants and 5 pepper plants? _____

4 **ELECTRICITY** An air conditioner (A/C) unit consumes 2 kilowatts of electricity on low and 5 kilowatts of electricity on high. The expression $2l + 5h$ represents how much electricity the A/C unit uses. Leandro ran the A/C unit for 3 hours on low and 6 hours on high yesterday. How many kilowatts of electricity did the A/C unit consume? _____

5 **SHOPPING** When Ayako goes shopping for clothes, she likes to buy complete outfits. She typically spends \$20 for pants, p, \$15 for shirts, s, and \$3 for socks, c. The expression $20p + 15s + 3c$ represents how much she usually spends. This morning she went shopping and bought 4 pairs of pants, 4 shirts, and 4 pairs of socks. How much did Ayako spend? _____

NAME _____ DATE _____

Lesson 3-3

Problem-Solving Practice

Solve.

1 **TRAVEL** Mr. Davis is driving 350 miles to visit his friend. He drives 150 miles the first day of the trip. How many miles does Mr. Davis still need to drive? _____

2 **TREES** Dion planted 20 fruit trees. He planted 8 apple trees. The rest of the trees were cherry trees. How many cherry trees did he plant? _____

3 **COOKIES** Melody baked 84 cookies for a bake sale. She divided the cookies equally into 21 bags. How many cookies did Melody put into each bag? _____

4 **TRAILS** Ruben hiked 2 trails over the weekend. He hiked a total of 22 miles. First Ruben hiked the Canyon Peak trail. What is the name of the second trail he hiked? _____

Hiking Trails	
Name	**Length (miles)**
Canyon Peak	14
Winding Way	9
Lone Wolf	8
Blue Spring	11

5 **EARNINGS** Ivan worked 16 hours last week and earned $128. How much money did Ivan earn in one hour? _____

6 **COLLECTIONS** Ally has 74 seashells in her collection. She gives 12 seashells to her sister. How many seashells are in her collection now? _____

7 **THEATER** Sandra bought 8 tickets to the play *Now is the Time*. All the tickets were in the same section. If Sandra spent $96 on tickets, in what section did she buy the tickets? _____

Ticket Prices for *Now is the Time*	
Section	**Price**
Lower Level	$15
Mezzanine	$14
Balcony	$12

8 **TENNIS** Jerry bought 6 cans of tennis balls. There are 3 tennis balls in each can. How many tennis balls did Jerry buy? _____

NAME _____ DATE _____

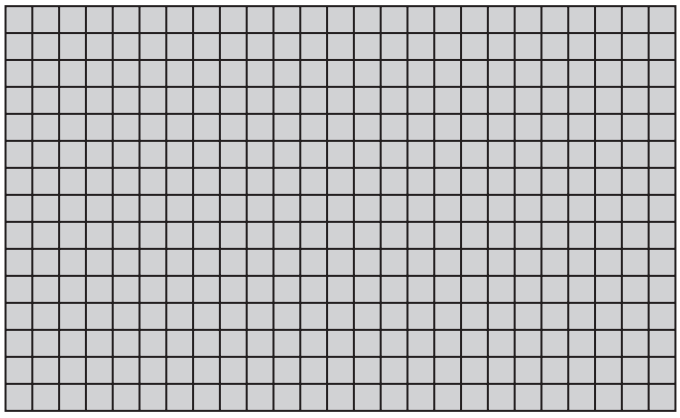
Lesson 3-4

Problem-Solving Practice

Use the formula $A = \ell \cdot w$ to solve for w, width.

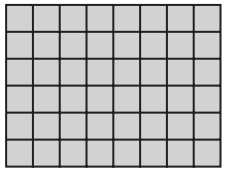
1 **PHOTOGRAPH** Brad has a photograph of his favorite football team that he wants framed. It is rectangular in shape, with a length of 25 inches. The area of the photograph is 375 square inches. What is the width of the photograph?

_____



2 **BLANKET** Rose is making a blanket for her friend for her birthday. She is using 48 square feet of material for the blanket. The length of the blanket is 8 feet. What is the width of the blanket Rose is making?

_____

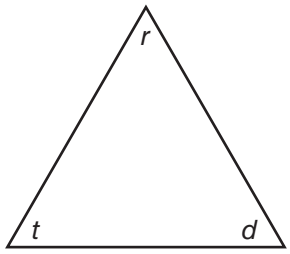


Use the fact triangle shown at the right.

3 Write four related multiplication and division equations for the distance formula.

_____ _____

_____ _____



Use the formula $d = r \cdot t$ to solve for the missing variable.

4 **MOTORCYCLING** Mike rode his motorcycle a total of 944 miles on his vacation. It took him 16 hours to ride this distance. What was his rate of speed?

_____

5 **TREADMILL** Ben enjoys working out. He walks on the treadmill at a rate of 5 miles per hour. How long would it take Ben to walk 10 miles at this rate of speed?

_____

NAME _____ DATE _____

Lesson 4-1

Problem-Solving Practice

Solve.

1. **SIGNS** What type of angle is shown on this sign?

_____

2. **ALPHABET** Consider these letters of the alphabet. Which letters have a right angle?

A E F H I

_____

3. **ALPHABET** Consider these letters of the alphabet. Which letters have an acute angle?

K L M N T

_____

4. **ALPHABET** Consider these letters of the alphabet. Which letters have an obtuse angle?

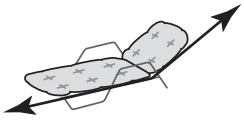
V W X Y Z

_____

5. **MAIL** When raising the flag on her mailbox, Annie noticed that the flag moved along an angle. What type of angle is formed with the raising of the mailbox flag?

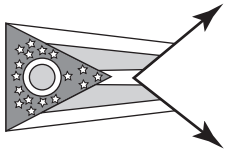
_____

6. **FURNITURE** Marlene placed this lounge chair on her patio. What type of angle is formed by the seat and back of the lounge chair?



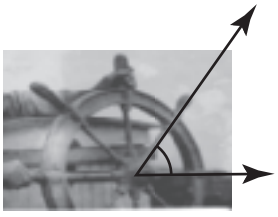
_____

7. **FLAGS** The state flag of Ohio is shown. It is the only state flag which is not a rectangle. What type of angle is formed along the right side of the flag?



_____

8. **BOATING** A boat's steering wheel is shown. What is the measure of the highlighted angle on the wheel?



_____

Chapter 4

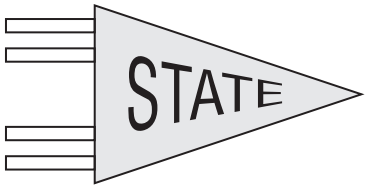
NAME _____ DATE _____

Lesson 4-2

Problem-Solving Practice

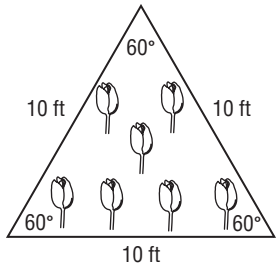
Solve.

1 **PENNANT** Viktorio had a pennant that looked like the one shown below. Classify the shaded part of the pennant by the measures of its angles.

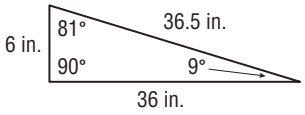


2 **YARD** Eric's yard is in the shape of a triangle. One side is 100 feet, one side is 150 feet, and one side is 220 feet. Classify the shape of the yard by the lengths of its sides.

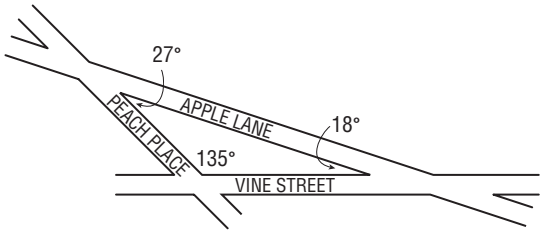
3 **GARDEN** Elias planted a garden of tulips as shown below. Classify the shape of the garden by the measures of its angles and the lengths of its sides.



4 **RAMP** Orville made a ramp for his miniature cars as shown. Classify the shape of the ramp by the lengths of its sides and the measures of its angles.



5 **STREET MAP** Apple Lane, Peach Place, and Vine Street are shown below. Classify the shape of the figure formed by these three streets.



Chapter 4

NAME _____ DATE _____

Lesson 4-3

Problem-Solving Practice

Solve.

1. **DRAWING** Tiffany drew a star that has triangular points. She found that the measure of each angle at the star's points is 38°. If the triangle is isosceles, what is the measure of each of the other angles in this triangle?

_____

2. **TOOLS** Architects use many tools to aid them in designing roads and structures. One of these is a drafting triangle which has angles that measure 90° and 60°. What is the measure of the third angle of this drafting triangle?

_____

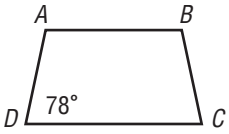
3. **SHOPPING** The sides of a shopping cart in a grocery store are quadrilaterals. What is the measure of the missing angle?

_____

4. **GEOMETRY** A right triangle has one acute angle that measures 24°. What is the measure of the other acute angle?

_____

5. **CLEANING** While cleaning the house, Sandra's mom notices that the dustpan is a trapezoid. The non-parallel sides of the trapezoid are equal, so the angles on each side are equal. What is the measure of each of the missing angles?



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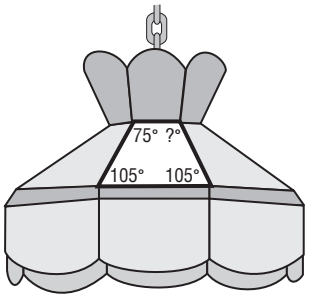
6. **LADDERS** Ivan is painting the ceiling in his living room. He is standing on a ladder that opens at an angle of 40°. What angle is formed where the floor meets the leg of the ladder? HINT: The ladder forms an isosceles triangle.

_____

7. **LIGHTING** A light fixture is made of glass cut in various shapes, one of which is a quadrilateral. In this quadrilateral, one acute angle measures 75° and each of the obtuse angles measures 105°. What is the measure of the other acute angle?



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Chapter 4

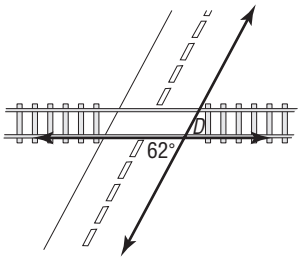
NAME _____ DATE _____

Lesson 4-4

Problem-Solving Practice

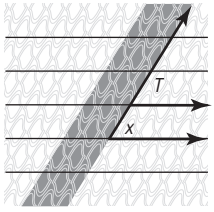
Solve.

1 **RAILROADS** Where a set of railroad tracks crosses a highway, the edge of the highway is the transversal to the rails of the track. What is the measure of $\angle D$?



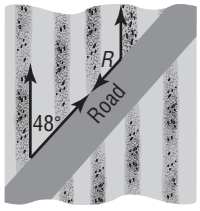
_____

2 **QUILTS** The quilt on Rhonda's bed has parallel gold stripes that ran the width of the quilt. There is a broad blue stripe that runs at an angle across the quilt as shown in the figure. What is the value of x if the measure of $\angle T$ is 70°?



_____

3 **FARMING** The fields on both sides of a road have been plowed in preparation for planting. The furrows made by the plow model parallel lines. They meet the edge of the road at a 48° angle. What is the measure of $\angle R$ in the figure?



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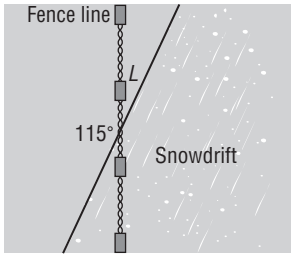
4 **GIFTS** Samantha wrapped a gift for her mother. The wrapping had thin red stripes on it. She wrapped ribbon around the package. What is the value of y in the figure if the measure of $\angle N$ is 52°?

_____

5 **WEATHER** During a winter storm, a snowdrift was created that crossed a fence line at a 115° angle as shown in the figure. What is the measure of $\angle L$?



_____

6 **ALPHABET** Consider the following letters of the alphabet. Which letters model parallel lines cut by a transversal?

A C E F G H J K L N S V W Y Z

_____

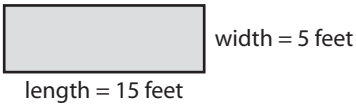
NAME _____ DATE _____

Lesson 5-1

Problem-Solving Practice

Solve.

1 **GARDENING** The dimensions of a flower garden are 15 feet long by 5 feet wide. In simplest form, what is the ratio of the garden's width to its length?



2 **HOBBIES** A jewelry-making kit contains 15 blue beads, 25 red beads, 10 yellow beads, and 30 black beads. In simplest form, what is the ratio of red beads to black beads?

3 **ELECTIONS** Carlos, Leona, and Kim ran for class president. The table below shows the number of votes each student received. In simplest form, what is the ratio of votes Carlos received to the total number of votes?

Votes Counted for Class President	
Carlos	𝍸 𝍸 𝍸 𝍸 II
Leona	𝍸 𝍸 𝍸 𝍸 I
Kim	𝍸 𝍸 III

4 **WEATHER** During the first 28 days of April, it rained on 8 days. If it rains the last two days of April, what will be the ratio of the number of rainy days in the month to the total number of days in the month? Write your answer in simplest form.

5 **BASEBALL** A baseball team played 120 games during a season. They won 80 games. What is the ratio of the number of games lost to the total number of games played? Write your answer in simplest form.

NAME _____ DATE _____

Lesson 5-2

Problem-Solving Practice

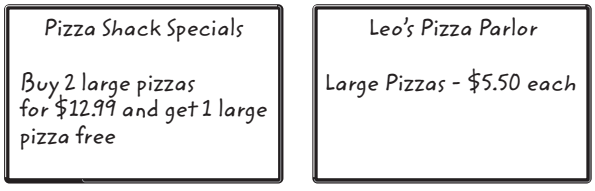
Solve.

1 **TECHNOLOGY** A laser printer can print 150 pages in 5 minutes. How many pages can the printer print in 22 minutes?

2 **FITNESS** The table below shows the time and distance walked by Jenna and Theo. Which walker had the faster unit rate? Show your work.

Jenna		Theo	
Time	Distance	Time	Distance
120 minutes	8 miles	90 minutes	6.5 miles

3 **FOOD** The diagrams below show the prices of large pizzas at two local restaurants. Which restaurant has the lower unit cost per pizza?



4 **AMUSEMENT PARKS** A Ferris wheel makes 10 revolutions in 4 minutes. How many revolutions does it make in 6 minutes?

5 **PLANTS** A plant grows 4.5 inches in 3 months. At the same rate, how many inches will the plant grow in 8 months?

6 **TRAVEL** A jet aircraft traveled 2,750 miles in 5 hours. Find a unit rate to describe its average speed.

7 **POPULATION** Which state in the table below has the greatest population per square mile?

State	2002 Estimated Population	Approximate Land Area (square miles)
Maryland	5,500,000	9,800
New York	19,200,000	47,000
Connecticut	3,500,000	5,000

NAME _____ DATE _____

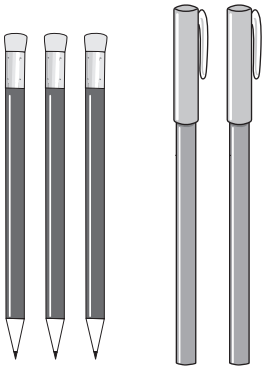
Lesson 5-3

Problem-Solving Practice

Solve.

1. **PACKAGING** The Bracket Company sends out 6 screws with each order of 2 brackets. How many screws do they need to send out with an order for 500 brackets? _____

2. **SCHOOL SUPPLIES** Mr. Goetz hands out the same combination of pens and pencils to each person on the first day of school. He handed out 42 pens. How many pencils did Mr. Goetz hand out? _____



3. **FITNESS** Awan's exercise routine includes repetitions of 20 push-ups and 30 sit-ups. On Tuesday, he did 100 push-ups. How many sit-ups did Awan do on Tuesday? _____

4. **BIOLOGY** Una is making media to culture cells. She uses 3 units of antibiotic for every 250 milliliters of media. She needs 1,000 milliliters of media. How many units of antibiotic does Una need to add? _____

5. **MAPS** Tulaya made a treasure map for her little brother. She says to take 6 steps for every 2 dashes on the map. If there are 5 dashes on the map, how many steps will her brother need to take? _____

6. **ENGINEERING** Ellis is designing heat ducts for a new building. The specifications for the system require ducts with 6 inches in diameter for every 10 cubic feet of air flow. One of the sections of the system has 40 cubic feet of air flow. What should the diameter of the duct be for this section? _____

7. **ADVERTISING** A beauty magazine needs to fill 6 pages with ads for every 9 pages of articles to meet their budget. This month's issue is projected to have 117 pages filled with articles. How many ad pages will the magazine have? _____

NAME _____ DATE _____

Lesson 5-4

Problem-Solving Practice

Solve.

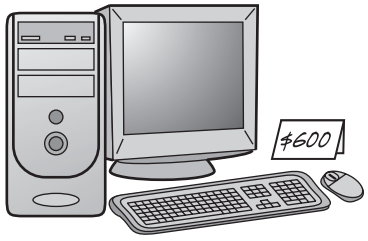
1. **SPA** Casey is filling her hot tub. The water fills the hot tub at a rate of 3 gallons per minute. Her hot tub has a capacity of 99 gallons. How long will it take for Casey to fill her hot tub? _____

2. **TECHNOLOGY** Ernesto downloaded a picture from his friend. The picture downloaded at a rate of 90 kilobytes per second. What was the size of the picture? _____

3. **TYPING** Marvin can type 52 words per minute. His boss gave him a 5-page report to type this morning. Marvin assumes that there are 250 words on each page. How long will it take him to type the report? _____

4. **HOUSEKEEPING** Felicia can clean 10 hotel rooms in 2 hours. Her boss wants to know how long it will take her to clean all 15 rooms on the 8th floor. How long will it take Felicia to clean all of the rooms? _____

5. **INCOME** Lakita is saving her money to buy a new computer. She gets paid $112.00 for 8 hours of work. How many hours will Lakita have to work to purchase a new computer?



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6. **FISH** Areva's fish tank is gaining 7 parts per million of nitrate every 2 days. Areva was told to change the water when it reaches 28 parts per million of nitrate. How often should Areva expect to change the water? _____

7. **UTILITIES** The Rollins family consists of 8 people. Mr. Rollins never has enough hot water for his shower. Their house has a 20-gallon hot water heater which runs out of hot water after 4 showers. Mr. Rollins wants to buy a larger water heater. Will everyone in the Rollins family be able to get a hot shower if Mr. Rollins buys a 35-gallon water heater? Explain.

_____

_____

_____

NAME _____ DATE _____

Lesson 6-1

Problem-Solving Practice

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 10 milliliters of solution into each of 10 test tubes. How many milliliters 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 inch by 1 inch. 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 square feet. Does Noah have enough paint? Explain. _____

NAME _____ DATE _____

Lesson 6-2

Problem-Solving Practice

Solve.

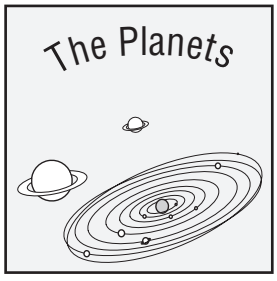
1. **WINDOW** Mr. Trout has a patio window that has an area of 36 square feet. The length and width of the window are the same. Use the positive square root of 36 to find the length of the window. _____

2. **FLOOR TILE** Humphrey is tiling the bathroom floor in his house. He covers the floor with 64 square tiles. The length and width of the bathroom are the same. Use the positive square root of 64 to find the number of tiles in each row. _____

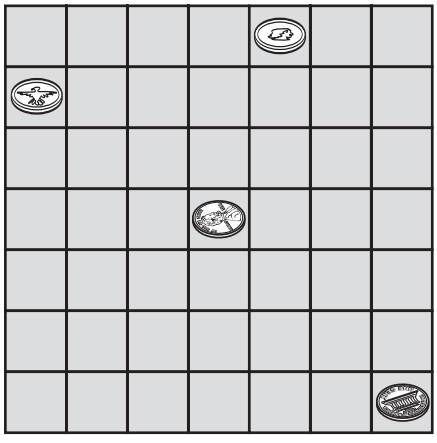
3. **TABLE COVER** Shelanda made a square card table cover. The area of the cover is 1 square meter. Use the positive square root of 1 to find the length of each side of the cover. _____

4. **SWIMMING POOL** Jacque has a square swimming pool. The area of the pool is 169 square feet. Use the positive square root of 169 to find the width of the pool. _____

5. **POSTER** Murphy is creating the poster shown for art class. The area of the poster is 9 square feet. The length and width of the poster are the same. Use the positive square root of 9 to find the length of the poster. _____



6. **GAME BOARD** A game board consists of 49 squares as shown. Use the positive square root of 49 to find the number of squares in each row. _____



Chapter 6

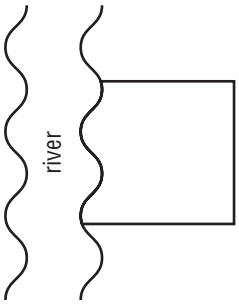
NAME _____ DATE _____

Lesson 6-3

Problem-Solving Practice

Solve.

1 **FLOODING** The figure shows the square area that was flooded when the river overflowed last spring. The area is 10 square miles. Estimate the length and width of the flooded area to the nearest mile.



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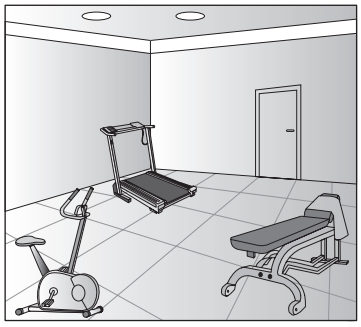
2 **MIRROR** Sharon has a square mirror on her wall. The area of the mirror is 35 square feet. Estimate the length and width of the mirror.

_____

3 **WORKOUT ROOM** The picture shows a square workout room with area 160 square meters. Estimate the length and width to the nearest whole number of meters.



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4 **COLLAGE** Aaron created a photo collage by mounting 100 2-inch square pictures on a square piece of cardboard. If there is $\frac{1}{2}$-inch of cardboard around the edges of the pictures, what is the length and width of the cardboard?

_____

5 **BACKYARD** The backyard at Mrs. Miagi's condominium is a square with area 124 square meters. Estimate the length and width of the yard to the nearest meter.

_____

6 **MEDIA CENTER** Ryan has a media center in his basement. The area of the room is 200 square feet. Estimate the length and width of the room to the nearest whole number.

_____

Chapter 6

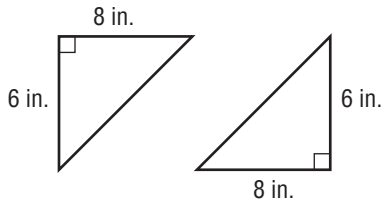
NAME _____ DATE _____

Lesson 6-4

Problem-Solving Practice

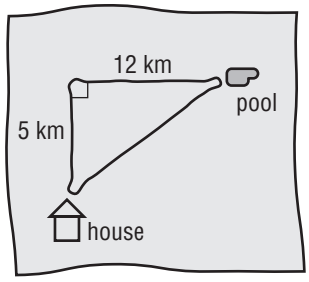
Solve.

1 **ORAGAMI** Dan is doing origami. He has a rectangular sheet of green paper that is 8 inches long and 6 inches wide. He cuts the paper in half diagonally to make 2 triangles. How long is the hypotenuse of each triangle?

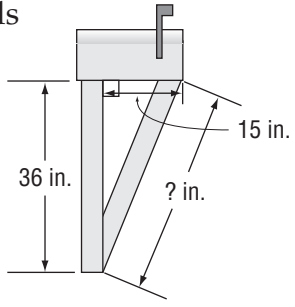


2 **ANTENNAS** Amalia put an antenna on the roof of her house. The vertical distance from the top of the antenna to the base of the house is 50 feet. The network is 120 feet from base of the house. If a right triangle is created, how long is the hypotenuse?

3 **SHORTCUTS** To get to the pool, Carlos usually bikes north, then east. One day, Carlos discovered he can bike straight to the pool if he goes through the meadow. Look at the map. How far does Carlos have to bike through the meadow to get to the pool?



4 **MAILBOX** Sarit is building a mailbox. He needs to check the mailbox's support on the post. Using Sarit's diagram, determine the length of the support.



Chapter 6

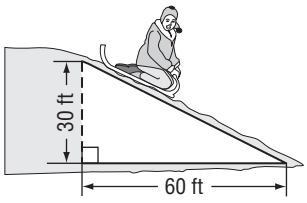
NAME _____ DATE _____

Lesson 6-5

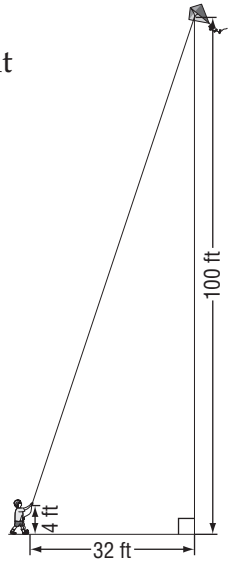
Problem-Solving Practice

Solve.

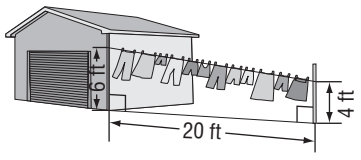
1 **SLEDDING** Max is sledding down the hill shown. What is the slope of the hill?



2 **KITE** Bart is holding the string to a kite 4 feet above the ground. The kite is 100 feet above a point on the ground 32 feet from Bart. Find the slope of the kite string.



3 **CLOTHESLINE** Leslie is stringing a clothesline from a pole that is 4 feet tall to a point on her garage 6 feet above the ground. The pole is 20 feet from the garage as shown in the diagram. Find the slope of the clothesline.



4 **RAMPS** A ramp begins at a doorway that is 8 feet above the ground. The ramp runs a horizontal distance of 20 feet. A person leaving the building wants to know what the slope is. What would you say?

Chapter 6

NAME _____ DATE _____

Lesson 6-6

Problem-Solving Practice

Solve.

1 **ANIMALS** Graph an equation to represent the data in the caption.

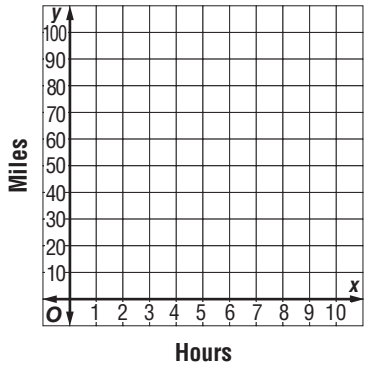
Write an equation.

Let x represent the number of hours and y represent the number of miles.

_____

The slope is _____.

A deer runs at a speed of approximately 30 miles per hour.



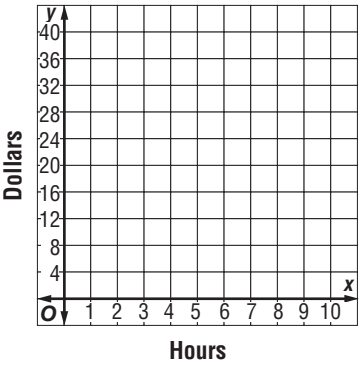
2 **MONEY** Luis earns $8 per hour. Graph an equation to represent the amount he earns in x hours.

Write an equation.

Let x represent the number of hours and y represent dollars.

_____

The slope is _____.



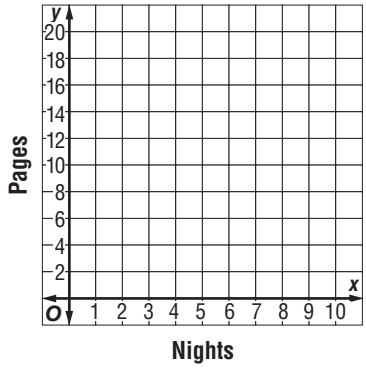
3 **SCHOOL** To complete a book for literature class, Aiden will read 5 pages every night. Graph an equation to represent the number of pages read after x nights.

Write an equation.

Let x represent the number of nights and y represent the number of pages.

_____

The slope is _____.



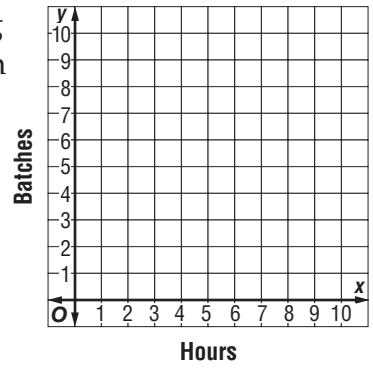
4 **BAKING** Julieta is baking cookies to give to her neighbors during the holidays. She bakes 3 batches of cookies every hour. Graph an equation to represent how many of batches she bakes in x hours.

Write an equation.

Let x represent the number of hours and y represent the number of cookie batches.

_____

The slope is _____.



Chapter 6

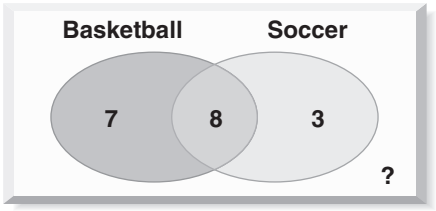
NAME _____ DATE _____

Lesson 7-1

Problem-Solving Practice

Solve.

1 **SPORTS** In Mr. Rivera's class, some students play basketball, some play soccer, and some play both basketball and soccer. There are 30 people in the class. How many students do not play either basketball or soccer?



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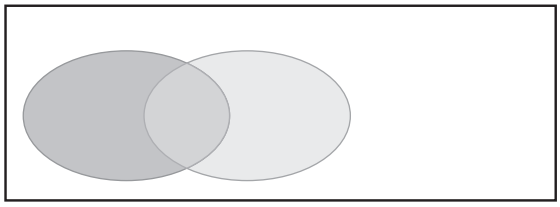
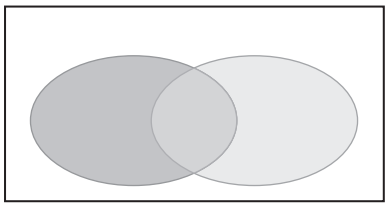
2 **SHOPPING** Amber was shopping at the grocery store and noticed that some fruits and vegetables are red, some are green, and some can be either red or green. She wrote down the names of the fruits and vegetables in the list below. Create a Venn diagram to sort them into the categories red, green, both, or neither.



Fruits and Vegetables

Apples	Peppers
Oranges	Broccoli
Grapes	Beets
Celery	Grapefruit
Strawberries	Lemons

3 **ALPHABET** Ben noticed that some letters are made of straight lines and some are made of curved lines. Using the letters shown below, construct a Venn diagram to show how the letters are sorted into letters made with straight lines or letters made with curved lines.



E O Z T U P D L B A

4 **NUMBER SENSE** Juan listed the first ten whole numbers divisible by 4:

4, 8, 12, 16, 20, 24, 28, 32, 36, 40

He noticed that some are also divisible by 6 and created a Venn diagram to sort them into numbers divisible by 4 or numbers divisible by 6. Which numbers are in both categories?

_____

NAME _____ DATE _____

Lesson 7-2

Problem-Solving Practice

Solve.

1 **CLASS PERIODS** Leta surveyed 9 schools to find the length of their class periods in minutes. The results are shown below. Find the mode, median, and range of the times.

90, 50, 45, 42, 55, 75, 80, 45, 60

2 **TELEVISION** Hans surveyed 11 classmates about how many minutes they spent watching television over the weekend. The results are shown below. Find the mode, median, and range of the times.

180, 120, 135, 90, 30, 45, 0, 60, 90, 300, 90

3 **CHESS TOURNAMENT** The members of the Centerville Junior High School chess team recorded the number of games they won in each tournament in the table below. Find the mode, median, and range of the number of wins.

Tournament Number	1	2	3	4	5	6	7	8	9
Number of Wins	3	5	2	1	0	4	2	0	0

4 **COFFEE SHOP** Five friends had dinner at the local coffee shop. The prices of their dinners are shown below. Find the mode, median, and range of the prices.

$5, $7, $4, $6, $7

5 **PETS** Wilhema asked 11 classmates how many pets they have. The results are shown in the table below. Find the mode, median, and range of the number of pets.

Name	Jack	Pete	Sue	Mary	Fred	Jeri	Ann	Teri	Cal	Mac	Amy
Number	0	2	4	3	1	1	1	2	3	5	0

NAME _____ DATE _____

Lesson 7-3

Problem-Solving Practice

Solve.

1 **BASEBALL** The teams in the conference won the following number of games during the season: 6, 11, 7, 5, 16, 20, 18, 21, 7, 9, and 12. What is the mean of this data set? _____

2 **MATH COMPETITION** The schools in Douglas County qualified the following numbers of math team members for the state competition: 24, 5, 8, 16, 2. What is the mean of this data set? _____

3 **ENROLLMENT** Amos knows that the average enrollment in the courses listed in the table is 26, but he forgot to record the number of students enrolled in Computer Graphics. What is the missing amount in the table? _____

Course	Enrollment
Art	36
Metals	15
Computer Graphics	
Auto Shop	31

4 **SWIMMING** The number of laps that each member of the swim team swam during practice yesterday was 7, 12, 16, 26, and 19. What is the mean of this data set? _____

5 **ANIMALS** The maximum speeds, in mph, of certain animals are given in the table. What is the average speed of these animals? _____

Animal	Speed (mph)
Cheetah	70
Lion	50
Elk	45
Zebra	40
Grizzly bear	30

6 **GARDENING** Packages of tulip bulbs contained 36, 37, 28, and 31 bulbs. What was the mean number of bulbs in a package? _____

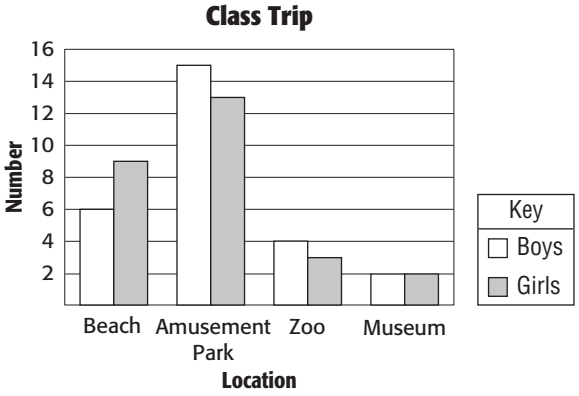
NAME _____ DATE _____

Lesson 7-4

Problem-Solving Practice

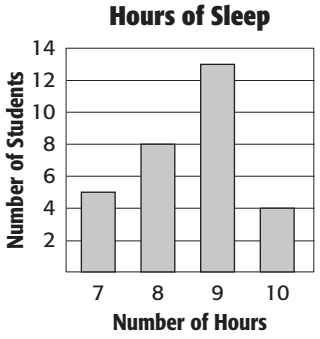
Solve.

1 **CLASS TRIP** The school activities director asked the eighth graders where they should go for their class trip. How many boys prefer the amusement park or the beach compared to the number of boys that prefer the zoo or the museum? _____

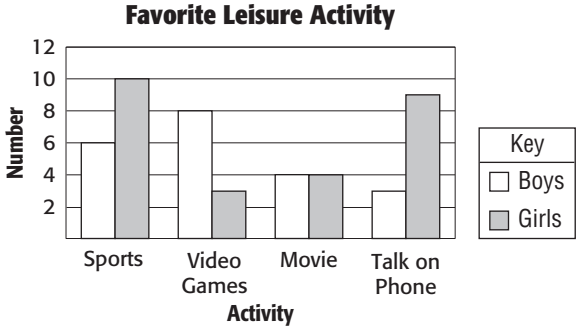


2 **ZOO** Use the graph in Exercise 1. How many more boys than girls prefer going to the zoo? _____

3 **SLEEP** How many more students average 9 hours of sleep per night than 8 hours? _____



4 **ACTIVITIES** How many more girls prefer to play sports or talk on the phone rather than playing video games or going to a movie? _____



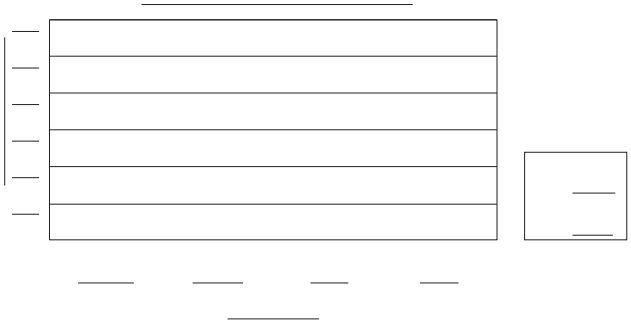
NAME _____ DATE _____

Lesson 7-5

Problem-Solving Practice

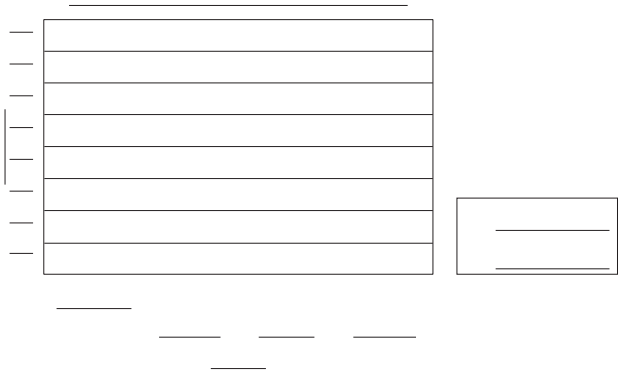
1 **ELECTION** A student reporter wants to make a double-bar graph to compare the number of boys and girls who said they voted for each candidate. Use the data in the table to create a double-bar graph.

Votes for Class President		
Candidate	**Boys**	**Girls**
Marcy	17	36
Brian	54	40
Lois	28	23
Tim	20	32



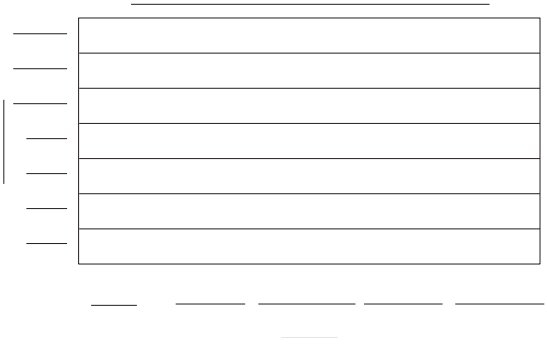
2 **TRACK AND FIELD** The track coach wants to compare the favorite events of the seventh and eighth graders on the track team. Use the data in the table to create a double-bar graph.

Favorite Track and Field Event		
Event	**7th Graders**	**8th Graders**
Hurdles	9	12
Relay Races	22	17
Long Jump	6	8
Discus Throw	4	9



3 **GREAT LAKES** Carl is doing a report on the Great Lakes and wants to compare their maximum depths. Use the data in the table to create a bar graph.

Maximum Depth of Great Lakes	
Lake	**Depth (feet)**
Erie	210
Huron	750
Michigan	925
Ontario	802
Superior	1,333



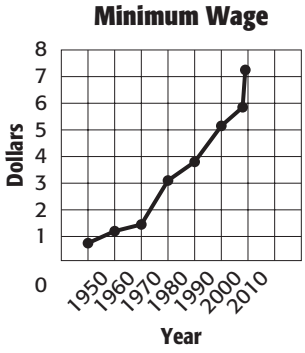
NAME _____ DATE _____

Lesson 7-6

Problem-Solving Practice

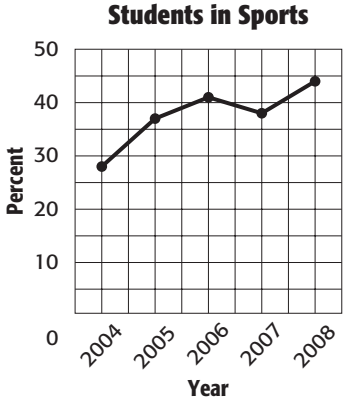
Use the line graph "Minimum Wage" to compare data.

1 **MINIMUM WAGE** For history class, Tamika created a line graph comparing the minimum wages throughout the years. Compare the minimum wage between 1970 and 1999.



Use the line graph "Students in Sports" to compare data.

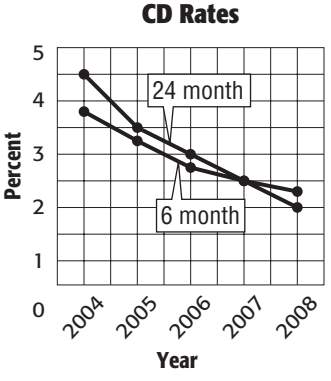
2 **SPORTS** When was the only time the percent of students in sports decreased from one year to the next?



3 **REFLECT** What other interval could be used for the graph? Why might you prefer this interval?

Use the double-line graph "CD Rates" to compare data.

4 **RATES** A banker wants to compare the interest rates of two types of CDs (certificates of deposit) in past years. Compare the rates for a 6 month CD and a 24 month CD in 2005.



5 **YEARS** If the trend continues, what would you expect the data to show for 2009?

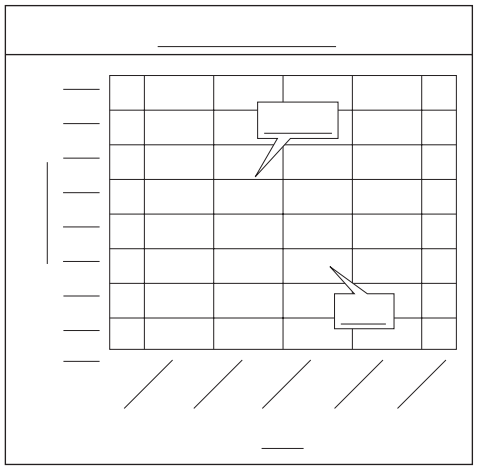
NAME _____ DATE _____

Lesson 7-7

Problem-Solving Practice

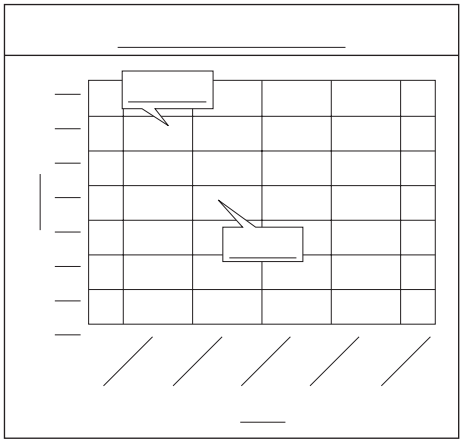
Solve.

1 **SALES** The manager of a book store wants to compare the number of pens and pencils sold each day of the first week of school. Use the data in the table to create a double-line graph.



Bookstore Sales		
Day	**Pens**	**Pencils**
Monday	$240	$620
Tuesday	$190	$560
Wednesday	$120	$470
Thursday	$310	$320
Friday	$460	$650

2 **TEST SCORES** A teacher wants to compare pre- and post-test scores to see how the new study program is working. Use the data in the table to create a double-line graph.

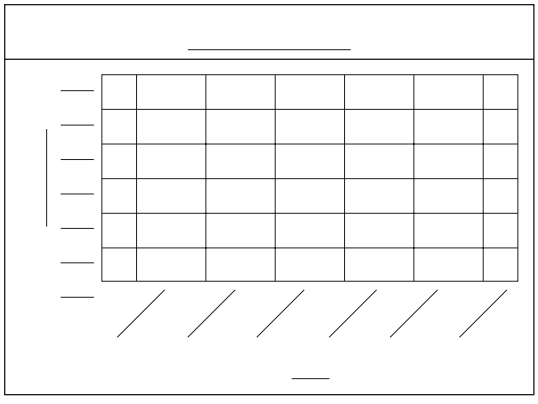


Average Test Scores		
Year	**Pretest**	**Posttest**
2005	32%	56%
2006	34%	58%
2007	39%	60%
2008	41%	64%
2009	43%	67%

3 **PREDICTIONS** For the graph in Exercise 2, predict the average pretest and posttest scores in 2010.

_____

4 **CUSTOMERS** A cafeteria manager wants to see how the dessert sales change throughout the week. Use the data in the table to create a line graph.



Dessert Sales						
Day	Mon	Tues	Wed	Thurs	Fri	Sat
Number	$52	$57	$46	$75	$98	$110

NAME _____ DATE _____

Lesson 8-1

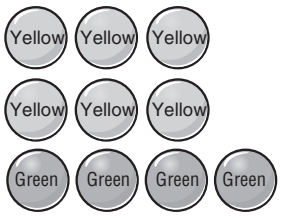
Problem-Solving Practice

Solve.

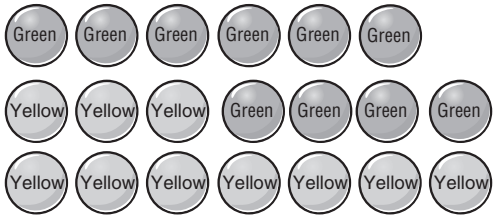
1. **BASKETBALL** At practice, Ben made 22 out of 25 free throws. Kirk made 18 out of 20 free throws. Who made the greater percent?

2. **SAVINGS** Jodi saves 20% of the money she earns. Serena saves 6% of the money she earns. If Jodi made $50 and Serena made $100, how much did each of them save?

3. **JUGGLING** A juggler has two sets of juggling balls. The number of yellow balls and green balls in each set is shown. In which set is the greater percentage of yellow balls?



Bag 1

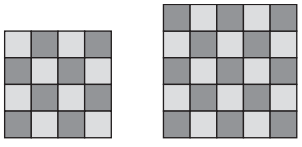


Bag 2

4. **SPORTS** The team has won 52 out of 80 games so far this season. Earlier in the season, they had won 42 out of 60 games. Has the team been doing better or worse? Explain.

5. **SHOPPING** Which store is offering the greater percent discount on their shirts?

6. **PATTERNS** Which pattern has the greater percentage of dark squares?


Pattern A Pattern B

7. **BOOKS** A school librarian asked all 300 students to name their favorite type of book. The responses are shown in the table. Find the number of students that named each type.

Type of book	Mystery	Fiction	Biography	Nonfiction
Percent of students	15%	44%	7%	34%

NAME _____ DATE _____

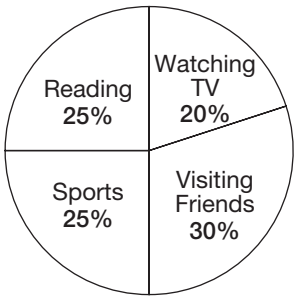
Lesson 8-2

Problem-Solving Practice

Solve.

1 **LEISURE TIME** Cassy kept track of how she spent her leisure time. She made the circle graph shown at the right. How many degrees are in each sector of the graph used to show her data?

Leisure Time Activities

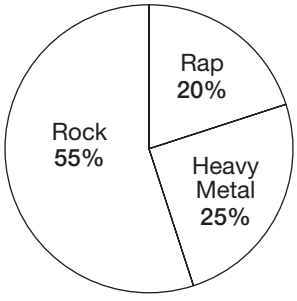


2 **FUNDRAISER** Hometown Middle School recently completed a fundraiser in which each class sold candles. Of the total number of candles sold, 20% were sold by the 6th graders, 45% by the 7th graders, and 35% by the 8th graders. Mrs. Apicella is making a circle graph of the sales. What is the degree measure of each sector?

3 **LOANS** A credit union offers auto loans, home-equity loans, and personal loans. Of the total loans last month, 40% were for auto loans, 10% were home-equity loans, and 50% were personal loans. The loan officer is making a circle graph to show this data. What is the degree measure of each sector?

4 **MUSIC** The eighth graders at a middle school were asked about their favorite type of music. The circle graph at the right shows the results of the survey. What is the degree measure of each sector?

Favorite Music



5 **ART** Marsha wants to do an art project using a circle. She wants to use a circle with 10 sectors of equal size. What percent of the circle will each sector represent? What is the degree measure of each sector?

NAME _____ DATE _____

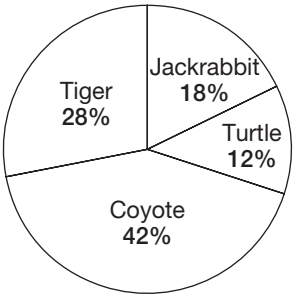
Lesson 8-3

Problem-Solving Practice

Solve.

1 **MASCOT** The 300 students at Washington Junior High School voted on a school mascot. The results of the voting are shown in the circle graph. Complete the table below. How many students voted for a jackrabbit?

Favorite Mascot

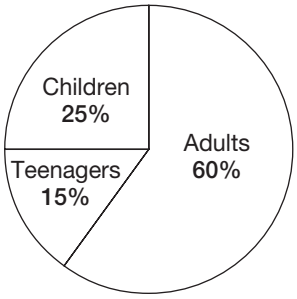


Mascot	Jackrabbit	Turtle	Coyote	Tiger
Percent				
Votes				

_____

2 **PARTY GUESTS** Becky was having a birthday party for her son. She invited 60 people. The age groups of the people who were invited are shown in the circle graph. How many teenagers were invited to the party?

Birthday Party Guests



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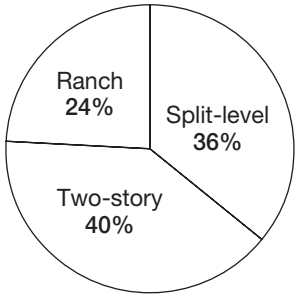
HOUSES There are 50 houses in a new housing development. The circle graph compares the three types of houses built there. Use the circle graph to answer the questions below.

Housing Development



3 How many houses are ranch houses?

_____

4 How many houses are ranch or split-level houses?

_____

5 How many houses are not split-level houses?

_____

Chapter 8

NAME _____ DATE _____

Lesson 8-4

Problem-Solving Practice

1 **BASKETBALL** The table below shows the points scored during a recent basketball game. Complete the table to show the decimal value, the percent, and the degree measure for each player.

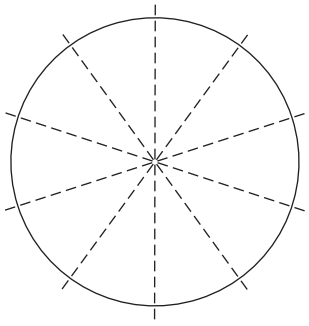
Player	Points Scored	Decimal Value	Percent	Degree Measure
Mark	24			
Cuonzo	4			
Alfonze	8			
Robbie	16			
Chris	28			
Total Check	**80**	**1.00**	**100%**	**360°**

2 **SHOES** A shoe salesman recorded his sales during last month. Complete the table to show the decimal value, the percent, and the degree measure for each shoe type.

Shoe Type	Number	Decimal Value	Percent	Degree Measure
Cross-Training	150			
Running	200			
Walking	50			
Baseball	100			
Total Check	**500**	**1.00**	**100%**	**360°**

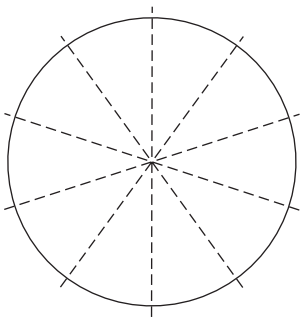
3 Use the table in Exercise 1 to create a circle graph.

Basketball Scoring



4 Use the table in Exercise 2 to create a circle graph.

Shoe Sales



NAME _____ DATE _____

Lesson 9-1

Problem-Solving Practice

Solve.

1 **COOKIES** The equation $y = 50 - x$ represents the number of cookies left y after x cookies have been eaten. Complete the table for the equation. Find three solutions of the equation. Describe what the solutions mean.

x	$50 - x$	y	(x, y)
4	50 − _____		
12			
30			

_____

_____

_____

2 **TEXT MESSAGES** The equation $y = 0.15x$ represents the total cost y of sending x text messages. Find three solutions of the equation when $x = 6$, 10, and 22. Describe what the solutions mean.

_____

_____

_____

3 **READING** The equation $y = 50x + 20$ represents the number of pages Lou has read in his book y after x hours. Find three solutions of the equation when $x = 2$, 5, and 8. Describe what the solutions mean.

_____

_____

_____

4 **IRONING** The equation $y = 28 - 6x$ represents the number of shirts Ava has left to iron y after x hours. Find three solutions of the equation when $x = 1$, 2, and 3. Describe what the solutions mean.

_____

_____

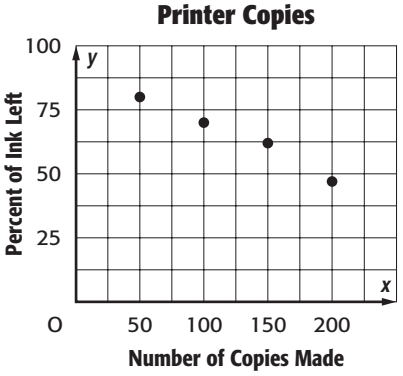
NAME _____ DATE _____

Lesson 9-2

Problem-Solving Practice

Solve.

1 **MAKING COPIES** Explain whether the scatter plot shows a *positive*, *negative*, or *no* relationship.



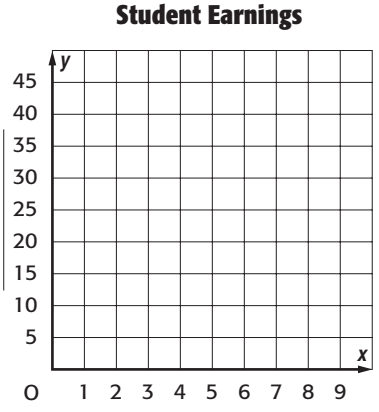
_____

_____

2 **EARNINGS** Amanda recorded information about the earnings of several classmates for last week. The table below shows the data. Create a scatter plot to find the relationship between the data sets.

Hours Worked	2	2	3	4	4	5	5	6
Money Earned	$12	$14	$22	$24	$28	$30	$40	$42

Describe the relationship between the hours worked and the money earned.



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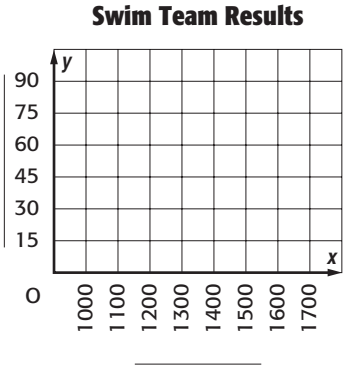
_____

3 **SWIMMING** The swim coach asked the swim team to track their calorie intake and minutes of exercise for the week. The table below shows the data. Create a scatter plot to find the relationship between the data sets.

Calories	1000	1200	1300	1400	1500	1600
Minutes of Exercise	60	45	45	60	30	60

Describe the relationship between the calorie intake and the minutes of exercise.



_____

_____

NAME _____ DATE _____

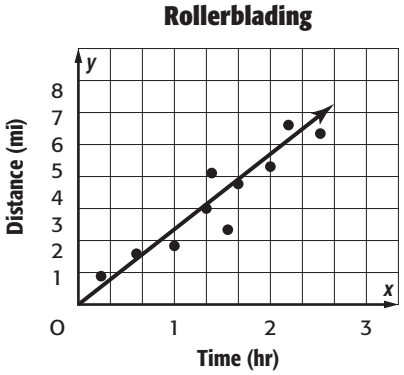
Lesson 9-3

Problem-Solving Practice

Solve.

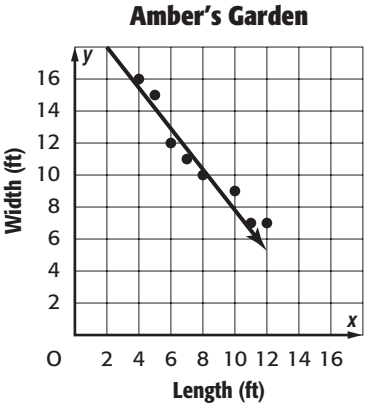
1 **ROLLERBLADING** Reiko is rollerblading. The scatter plot shows the distance she has traveled since she started. Use the line of best fit shown to predict the total distance Reiko will have traveled after 3 hours.

_____



2 **GARDENING** Amber is designing a rectangular garden. The scatter plot shows the length and width that her garden could be. Use the line of best fit shown to predict the width when the length is 13 feet.

_____



3 **BANKING** The scatter plot shows the number of people who used an ATM machine at various times during the day. Explain whether you can draw a line of best fit for the data.

_____

_____

_____