Problem of the Day
Five friends are waiting in line for a movie. Jeff is immediately behind Kelly. Joe is not one of the first three. Michelle is not ahead of Joe. Matt is first. In which order are the friends standing?

Quick Review
Add 111 to each number.
1. 567
2. 328
3. 244
4. 1,760
5. 5,387
6. 2,872

Lesson Quiz
Write each number in standard form.
1. 69 thousand, 78
2. four hundred fifty thousand, eighty-nine
3. \(20,000 + 400 + 30 + 9\)
4. \(700,000 + 2,000 + 600 + 5\)
Problem of the Day
A four-digit number has the digit 5 in both the ones and the hundreds places. The tens digit is 3 more than the ones and twice the thousands digit.
What is the number?

Quick Review
Use mental math to multiply.
1. $46 \times 10$
2. $313 \times 100$
3. $1,905 \times 10$
4. $64 \times 1,000$

Lesson Quiz
Use exponents to write each number in expanded form.
1. $3,049$
2. $415,620$
3. $70,738$
Problem of the Day
Abdul has reading homework and math homework. He spends 30 minutes on reading and 45 minutes on math. Abdul finishes his homework at 8:30. What time did he start?

Quick Review
1. \(4 \times 10^5 = j\)
2. \(5,000 + 200 + 10 = b\)
3. \((2 \times 10^4) + (1 \times 10^2) = u\)
4. \((8 \times 10^5) + (3 \times 10^1) = s\)

Lesson Quiz
Write each number in standard form.
1. 131 million, 5 thousand, 4
2. twenty-six billion, one hundred eight million, seventy-four thousand, four hundred five
3. \((5 \times 10^8) + (4 \times 10^6) + (3 \times 10^5) + (4 \times 10^4) + (9 \times 10^1)\)
Problem of the Day
Jocelyn and Kim collect refrigerator magnets. Jocelyn has 35 more magnets than Kim. Kim has 60 magnets. How many magnets do the two girls have in all?

Quick Review
Write the value of the underlined digit in short word form.
1. 3,584
2. 89,209,627
3. 4,243,578,106
4. 7,386,918

Lesson Quiz
Compare. Write >, <, or = for each .
1. 37,508 35,976
2. 481,976 1,006,119
Round to the place of the underlined digit.
3. 7,194
4. 453,207
Problem of the Day
Use the digits 0–9 to write a ten-digit whole number. Use each digit only once. What are the least and greatest possible numbers if the digit 3 is in the billions place and the digit 9 is in the millions place?

Quick Review
Write each number in standard form.
1. seventy-six million, three thousand, nine hundred eight
2. \((4 \times 10^5) + (3 \times 10^4) + (7 \times 10^2) + (9 \times 10^0)\)
3. 76 billion, 349 million, 94

Lesson Quiz
Write each in standard form.
1. forty-eight thousandths
2. seven hundredths
3. thirty and sixteen hundredths
4. seven and nine thousandths
Problem of the Day
Ben buys a hardcover book and a paperback book. The total cost is $36. The hardcover book costs twice as much as the paperback. What is the cost of each book?

Quick Review
Write the next three numbers for each sequence.
1. 10, 20, 30, . . .
2. 5, 10, 15, 20, . . .
3. 8, 16, 24, . . .
4. 25, 50, 75, . . .
5. 12, 24, 36, . . .

Lesson Quiz
Find a pattern to solve the problem.
Problem of the Day
The first four beads in a necklace are in this order: blue, green, green, blue. This sequence is continued for 100 beads. What color is the 25th bead?

Quick Review
Write the value of the underlined digit in words.
1. 2.619
2. 503.179
3. 24.275
4. 38.96

Lesson Quiz
Compare. Write >, <, or = for each .
1. 0.7 0.008
2. 1.475 1.494
Round to the place of the underlined digit.
3. 0.343
4. 0.635
Problem of the Day
A small cup of juice is $2 and a large cup is $3. A sandwich is $5. Nolan uses a $20 bill to buy a sandwich and a juice. He receives exactly 3 bills in change. Which size of juice did he buy?

Quick Review
Compare. Write >, <, or = for each .
1. 49   53
2. 935   1,006
3. 7,084   7,069
4. 307   296

Lesson Quiz
Write an algebraic expression for each word phrase.
1. Add 3 to a number
2. Take 7 from a number
Evaluate each expression when \( a = 12 \)
3. \( a + 3 \)  
4. \( 17 - a \)
Problem of the Day
The weather service measures the amount of snow that falls each hour during a snowstorm. The measurements after 5, 6, and 7 hours were 2.5 in., 3.0 in., and 3.5 in. If the pattern continues, how much snow will fall in 12 hours?

Quick Review
Round to the place of the underlined digit.
1. 582
2. 3,247
3. 7,650
4. 5,413

Lesson Quiz
Estimate. Tell which method you used.
1. 793 + 825
2. 3,205 + 7,494
3. 829 – 594
4. 8,813 – 4,605
Problem of the Day
Brad wants to find out all of the possible 2-digit numbers he can write using 1–9. How many possible ways can Brad’s numbers be arranged?

Quick Review
Estimate the sum or difference by rounding to the nearest hundred.

1. $312 + 694$
2. $593 - 188$
3. $236 + 365$
4. $829 - 496$
5. $722 + 543$

Lesson Quiz
Add or subtract. Check that your answer is reasonable.

1. $946 + 838$
2. $12,312 + 5,702 + 568$
3. $788 - 97$
4. $3,212 - 2,809$
5. $42,135 - 9,416$
Problem of the Day
A computer game has a target with changing values. The values are 500, 750, 1,500, and 2,500. Abdul hit the target 3 times and scored a total of 4,000 points. What was the value each time Abdul hit the target?

Quick Review
Add or subtract. Check that your answer is reasonable.
1. \(729 + 846\)
2. \(3,085 + 946 + 7,215\)
3. \(651 - 132\)
4. \(60,008 - 2,746\)

Lesson Quiz
Add or subtract. Tell what method you used.
1. \(694,056 + 702,895\)
2. \(3,254,082 + 2,100,000\)
3. \(359,561 - 140,000\)
4. \(5,700,060 - 2,532,049\)
Problem of the Day
Marc had more stickers than Susie. Susie had more stickers than Joe. Joe had fewer stickers than Greta. Greta had fewer stickers than Susie. Who had the most stickers?

Quick Review
Evaluate each expression when $f = 6$.
1. $f + 5$
2. $10 - f$
3. $f - 2$
4. $7 + f$

Lesson Quiz
Use mental math to solve the equations. Use models if necessary.
1. $s + 7 = 10$
2. $13 - g = 6$
3. $a - 6 = 3$
4. $8 + n = 16$
Problem of the Day
Sally added $120 to her total savings. Then she bought a CD player for $80. She now has $90. How much money did Sally start with?

Quick Review
Add or subtract.
1. $32,805 + 946,049$
2. $1,496,325 + 4,100,000$
3. $756,085 - 479,381$
4. $6,872,000 - 2,002,000$

Lesson Quiz
Solve. If there is not enough information, tell what information is needed.
An amusement park had 12,590 visitors last Saturday. On a normal weekend, the park has 25,000 visitors. How many fewer visitors than normal did the amusement park have last weekend?
Problem of the Day
After 2 hours, a train has traveled 120 miles. After 3 hours, the train has traveled 180 miles. After 4 hours, the train has traveled 240 miles. Predict the distance that the train will have traveled after 5 hours.

Quick Review
Evaluate each expression when \( n = 6 \).

1. \( n + 9 \)  
2. \( 20 + n \)  
3. \( 12 - n \)  
4. \( n - 2 \)

Lesson Quiz
Write an expression for each.
1. the product of 8 and a number  
2. a number divided by 10  
Evaluate each expression, given \( f = 9 \), \( g = 5 \), and \( t = 0 \).
3. \( f \cdot t \)  
4. \( (f \cdot g) \cdot 2 \)
Problem of the Day
Jordan lives 20 minutes from the gym. She takes 10 minutes before and 10 minutes after her gymnastics practice to stretch. Gymnastics practice lasts 1 hour and 45 minutes. If Jordan left her house at 8:20 a.m., what time did she arrive back home?

Quick Review
1. $4 \times 10$
2. $9 \times 5$
3. $7 \times 6$
4. $3 \times 30$

Lesson Quiz
Draw and divide a rectangle to show each product. Use the Distributive Property to find the product.
1. $5 \times 12$
2. $4 \times 38$
3. $7 \times 26$
4. $8 \times 16$
Problem of the Day
Shari is using 1-inch square tiles to make a border around a mirror. The sides of the mirror are 6 inches each. If Shari uses black tiles for the corners and gray tiles for the rest of the sides, how many tiles of each color will she use?

Quick Review
1. $90 - 70$
2. $3,000 + 2,000$
3. $200 + 800$
4. $1,300 - 700$
5. $900 + 900 + 100$

Lesson Quiz
Use Logical Reasoning to solve.
Erin, Rob, Tony, and Sal were the first four finishers in a race. Erin did not win the race. Tony finished before Erin. Tony did not finish before Rob or Sal. Sal was not first. In what order did the racers finish?
Problem of the Day
Shari is using 1-inch square tiles to make a border around a mirror. The sides of the mirror are 6 inches each. If Shari uses black tiles for the corners and gray tiles for the rest of the sides, how many tiles of each color will she use?

Quick Review
1. 90 – 70
2. 3,000 + 2,000
3. 200 + 800
4. 1,300 – 700
5. 900 + 900 + 100

Lesson Quiz
Use Logical Reasoning to solve.
Erin, Rob, Tony, and Sal were the first four finishers in a race. Erin did not win the race. Tony finished before Erin. Tony did not finish before Rob or Sal. Sal was not first. In what order did the racers finish?
Problem of the Day
Maria found 3 shells on the beach. Gloria found 10 times as many shells as Maria. Tina found 10 times as many shells as Gloria. How many shells did the three girls find in all?

Quick Review
1. $7 \times 65$
2. $8 \times 31$
3. $9 \times 605$
4. $4 \times 8,200$
5. $3 \times 4,513$

Lesson Quiz
Use a pattern or mental math to find each product.
1. $8 \times 40$
2. $30 \times 9,000$
3. $640 \times 70$
4. $371 \times 80$
Problem of the Day
A souvenir stand sells pens for $3 each, calendars for $12 each, shirts for $19 each, and visors for $15 each. Jan bought 2 items. She gave the clerk two $20 bills. If Jan received $9 in change, which items did she buy?

Quick Review
Round to the place of the underlined digit.
1. 735 2. 528
3. 650 4. 174

Lesson Quiz
Estimate by using front-end estimation. Then estimate by rounding.
1. 69 \times 56
2. 43 \times 27
3. 612 \times 42
4. 531 \times 76
Problem of the Day
Two numbers have a product of 175 and a sum of 40. What are the numbers?

Quick Review
Evaluate each expression.
1. $3n$, when $n = 8$
2. $7 \cdot w$, when $w = 60$
3. $9 \cdot (p + 3)$, when $p = 7$
4. $2 \times 6 \times j$, when $j = 5$
5. $(5 \times k) \times 7$, when $k = 4$

Lesson Quiz
Find each product.
1. $72 \times 48$
2. $59 \times 82$
3. $824 \times 38$
4. $68 \times 307$
Problem of the Day
Muriel earns $12 per hour. For each hour above 40 hours in a week, Muriel’s pay is $18 per hour.
How much does Muriel earn if she works 48 hours in a week?

Quick Review
Estimate by using front-end estimation. Then estimate by rounding.
1. $72 \times 31$
2. $48 \times 62$
3. $278 \times 85$
4. $444 \times 36$

Lesson Quiz
Solve. Explain your answer.
Milo wants to buy a computer system that costs $2,500. If he saves $45 each week, will he save enough money to buy the computer system in a year? (There are 52 weeks in a year.)
Problem of the Day
Complete the pattern to make this equation true.
17 + 22 + 27 + □ + □ + □ = 177

Quick Review
Multiply mentally.
1. 300 × 7
2. 9 × 600
3. 4 × 500
4. 8,000 × 7

Lesson Quiz
Estimate the quotient.
1. $6)\overline{356}$
2. $8)\overline{331,516}$
3. $5,079 \div 7$
4. $613,480 \div 9$
Problem of the Day
City Cinema sells a gift pack of 8 tickets for $64 and a gift pack of 6 tickets for $54. What is the least expensive way to buy 24 tickets? What is the total cost?

Quick Review
Divide mentally.
1. \(48 \div 8\)  
2. \(49 \div 7\)  
3. \(28 \div 4\)  
4. \(27 \div 3\)  
5. \(40 \div 5\)  
6. \(21 \div 7\)

Lesson Quiz
Divide and check.
1. \(7)27,429\)  
2. \(4)345,124\)  
3. \(682 \div 4\)  
4. \(4,534 \div 8\)
Problem of the Day
Nelson is making a lamp with a chain that is 32 inches long. He wants to make the chain so that it alternates 2-inch links and 3-inch links. How many links of each type will he need?

Quick Review
1. \(324 + 400 = a\)
2. \(3,000 - 569 = g\)
3. \(3 \times 561 = y\)
4. \(3,208 \div 8 = p\)

Lesson Quiz
Name the operation(s) you used to solve.
Laurette has 41 pens from cities in the United States and 27 pens from cities in other countries. She is putting them in display cases that hold 4 pens each. How many display cases does she need?
Problem of the Day
Nadia’s current work schedule is 10:00 A.M. to 6:00 P.M., 5 days per week. Nadia is being switched to a 4-day workweek. If her weekly number of hours does not change, how many hours will she work each day?

Quick Review
1. $160 \div 8$
2. $8,100 \div 9$
3. $360,000 \div 6$
4. $72,000 \div 8$
5. $420,000 \div 6$

Lesson Quiz
Tell whether each number is divisible by 2, 3, 4, 5, 6, 9, or 10.
1. 675
2. 860
3. 2,424
4. 6,336
Problem of the Day
Use estimation to solve.
2,177,000 people visited a museum in 2001; 2,199,000 in 2002; and 2,221,000 in 2003. If the pattern continues, how many people would visit a museum in 2005, to the nearest ten thousand?

Quick Review
Estimate the quotient.
1. \(\frac{634}{8}\)
2. \(\frac{294,563}{4}\)
3. \(\frac{7,294}{3}\)
4. \(\frac{342,785}{9}\)

Lesson Quiz
Divide.
1. \(\frac{4,045}{5}\)
2. \(\frac{48,603}{8}\)
3. \(\frac{724}{8}\)
4. \(\frac{574,328}{7}\)
Problem of the Day
Naomi buys a watch and a sweater for a total of $100. The watch costs $10 more than the sweater. What is the cost of each item?

Quick Review
Tell whether each number is divisible by 2, 3, 4, 5, 6, 9, or 10.
1. 924
2. 1,035
3. 2,020
4. 6,318
5. 4,425

Lesson Quiz
Wendy bought a pen for 88¢. She used 9 coins. What were the coins?
Problem of the Day
Four friends get the top four scores on a test. The scores are 96, 95, 94, and 87. Paul’s score is not divisible by 3. Ling’s score is divisible by 5. Cara’s score is greater than Simon’s score. What was each friend’s score?

Quick Review
Evaluate each expression, given $j = 8$, $k = 3$ and $m = 0$.
1. $5k$
2. $j + k$
3. $m(9)$
4. $j \cdot (5 + k)$

Lesson Quiz
Use mental math to solve the equations.
1. $7v = 35$
2. $m \div 7 = 9$
3. $54 \div t = 6$
4. $4p = 16$
Problem of the Day
Nancy bought a book for $19 and a magazine for $4. She paid with exact change, using six bills. What six bills did she use?

Quick Review
1. $6 \times 70$
2. $50 \times 60$
3. $90 \times 400$
4. $700 \times 70$
5. $60 \times 80$

Lesson Quiz
Divide. Use mental math.
1. $270,000 \div 90$
2. $12,000 \div 300$
3. $420,000 \div 60$
4. $150,000 \div 5,000$
Problem of the Day
Gary is thinking of a four-digit number. The tens and thousands digits are the same. The ones digit is 3 times the hundreds digit, which is an even number. The sum of the digits is 24. What is Gary’s number?

Quick Review
1. 723 ÷ 8
2. 81 ÷ 6
3. 49,028 ÷ 7
4. 3,751 ÷ 5
5. 486,054 ÷ 6

Lesson Quiz
Divide. Check your answer.
1. 42)892
2. 27)972
3. 87 ÷ 23
4. 964 ÷ 42
Problem of the Day
A gym offers a 2-year membership for $1,200, a 3-year membership for $1,650, and a 5-year membership for $2,250. Marian computes to find that her membership costs her $550 per year. Which membership did she buy?

Quick Review
Write a related division fact.
1. $9 \times 7 = 63$
2. $8 \times 5 = 40$
3. $6 \times 4 = 24$
4. $9 \times 9 = 81$

Lesson Quiz
Work backward to solve the problem.
Carmen and Pam combined to score one third of their team’s points. Pam’s point total was 6 more than Carmen’s. If Carmen scored 14 points, how many points did the team score?
Problem of the Day
The fifth-grade class is going on a field trip. There are 3 buses, each with 40 students and a driver. There are 4 cars, each with 3 students and a driver. How many people are going on the field trip?

Quick Review
Divide. Use mental math.
1. \(16,000 \div 40\)
2. \(5,400 \div 90\)
3. \(420,000 \div 600\)
4. \(90,000 \div 3,000\)

Lesson Quiz
Divide. Check your answers.
1. \(32\overline{918}\)
2. \(17\overline{624}\)
3. \(458 \div 92\)
4. \(849 \div 43\)
Lesson Transparency 5.5

Problem of the Day
Mr. Gomez is taking his wife and three children to an amusement park. Estimate the amount of money he will need for admission if the adult tickets cost $28.95 and the children’s tickets cost $19.95.

Quick Review
Multiply or Divide.
1. \( \frac{827}{69} \)
2. \( \frac{562}{40} \)
3. \( 79 \times 49 \)
4. \( 27 \times 1,001 \)

Lesson Quiz
Divide.
1. \( \frac{7,219}{94} \)
2. \( \frac{20,019}{47} \)
3. \( \frac{8,456}{21} \)
4. \( \frac{446,109}{37} \)
Problem of the Day
A train travels 210 mi from Elk Heights to Howell at 60 mi/h. Another travels 225 mi from Mt. Morris to Howell at 75 mi/h. If they both begin their trips at the same time, which arrives at Howell earlier? How much earlier?

Quick Review
Simplify.
1. \((3 + 8) + 2\)
2. \(5 \times (13 \times 20)\)
3. \(75 + (25 + 98)\)
4. \((48 \times 6) \times 0\)

Lesson Quiz
Use Guess and Check to solve.
Simplify.
1. \(7 + (27 \div 3) \times 4\)
2. \((72 \div 4) + 3^2\)
3. \((42 - 12) \div (3 + 3) + (2 \times 5)\)
4. \(679 - (115 - 45) \times 2\)
Problem of the Day
Write +, −, or × for each □ to make the equation true.
(3 □ 90) □ 30 = (25 □ 5) □ 15

Quick Review
Divide.
1. 115 ÷ 6
2. 249 ÷ 12
3. 74 ÷ 14
4. 238 ÷ 9
5. 196 ÷ 3

Lesson Quiz
Solve. Explain how you decided to interpret the remainder.
The Mountaineering Club is driving to a state park in vans that can carry 8 club members apiece. There are 27 members. How many vans are needed?
Problem of the Day
The product of two numbers is 64 and the difference is 12. What are the numbers?

Quick Review
Name the value of each underlined digit.
1. 34,067
2. 508,980
3. 42,560,418
4. 87,123,049
5. 241,008,208

Lesson Quiz
Tell whether an exact measurement is needed or whether an estimate is sufficient.
1. You are cutting wood to cover the bulletin board in the classroom.
2. Your doctor needs to know how tall you are.
3. Are the sizes small, medium, and large estimates or precise measurements?
Problem of the Day
The population of Oakwood was 12,290 in 1980, 12,810 in 1990, and 13,297 in 2000. Round each total to the nearest hundred. If this pattern were to continue, predict the estimated population of Oakwood in 2020.

Quick Review
1. 7 × 12 = n
2. 545 ÷ 36 = a
3. 8 × 5,280 = r
4. 76 ÷ 3 = k
5. 12 × 1,760 =

Lesson Quiz
Complete.
1. 4 yd = ■ ft
2. ■ in. = 3 ft 5 in.
3. 7,000 ft = ■ mi ■ ft
4. 4\frac{1}{2} mi = ■ yd
Problem of the Day
Bruce has 6 coins in his pocket. The coins are worth a total of 36¢. What are the 6 coins?

Quick Review
1. \(7 \times 2,000 = b\)
2. \(7 \times 16 = c\)
3. \(23 \div 4 = n\)
4. \(74 \times 8 = k\)
5. \(90 \div 16 = g\)

Lesson Quiz
Complete.
1. \(3 \text{T} = \text{lb}\)
2. \(\text{pt} = 4 \text{ qt} 1 \text{ pt}\)
3. \(140 \text{ oz} = \text{lb} \text{ oz}\)
4. \(55 \text{ qt} = \text{gal} \text{ qt}\)
Problem of the Day
Nell makes and sells jewelry. She made 6 new bracelets. She sold 9 bracelets. She had 8 bracelets left. How many bracelets did Nell have before she made the new bracelets?

Quick Review
1. \(5 \times 1,000 = a\)
2. \(500 \div 10 = n\)
3. \(29 \times 100 = f\)
4. \(42,000 \div 100 = r\)
5. \(805 \times 10 = y\)

Lesson Quiz
Complete.
1. \(200 \text{ cm} = \square \text{ m}\)
2. \(\square \text{ dm} = 900 \text{ mm}\)
3. \(57,000 \text{ m} = \square \text{ km}\)
4. \(840 \text{ dm} = \square \text{ m}\)
5. \(380 \text{ mm} = \square \text{ cm}\)
Problem of the Day
Ron, Jon, Tom, and Tim are brothers. Their ages are 7, 8, 12, and 16. Ron is twice as old as Tom. Tim is not the youngest. List the brothers from youngest to oldest.

Quick Review
1. \(4,000 \div 1,000 = f\)
2. \(5 \times 2,000 = n\)
3. \(450 \div 10 = a\)
4. \(36,000 \div 1,000 = t\)
5. \(947 \times 10 = s\)

Lesson Quiz
Compare. Write >, <, or = for each .
1. \(3 \text{ t } \) 3,000 kg
2. \(4,500 \text{ mg } \) 47 g
3. \(70 \text{ dL } \) 6,000 mL
4. \(4 \text{ L } \) 25,000 mL
Problem of the Day
Juan buys a shirt and a baseball cap for a total of $43. The shirt costs $15 more than the baseball cap. How much does each item cost?

Quick Review
Write >, <, or = for each □.
1. 25 + 32 □ 60
2. 75 + 50 □ 100
3. 135 − 37 □ 100
4. 908 + 1,101 □ 2,000
5. 29 + 49 □ 60

Lesson Quiz
Add or subtract.
1. 7 lb 5 oz − 4 lb 8 oz
2. 3 L 6 dL + 5 L 3 dL
3. 5 ft − 6 in.
4. 4 h 13 min + 52 min
5. 7 kg − 560 g
Problem of the Day
Al did math homework for 30 min. and reading homework for 45 min. He ended at 5:15. At what time did he start?

Quick Review
Write the time it will be 30 minutes later.
1. 4:00 A.M.
2. 7:40 P.M.
3. 9:25 P.M.
4. 11:30 A.M.

Lesson Quiz
1. Leah catches a train that leaves at 3:40 P.M. and arrives at 4:20 P.M. She needs 10 minutes to walk to the station. She needs 5 minutes to walk to her appointment. How long does Leah’s trip take?
2. Jiro leaves home at 7:25 A.M. and arrives at work at 8:40 A.M. Janell leaves at 7:10 A.M. and arrives at 8:30 A.M. Whose trip takes longer? How much?
Problem of the Day
Charlie has 69 photographs to mount in a new album. Each page of the album can fit 6 photos. What is the least number of pages Charlie needs to mount all his photos?

Quick Review
1. $937 + 609 = m$
2. $13,901 - 648 = a$
3. $54,838 - 29,009 = s$
4. $5,823 + 474 = g$

Lesson Quiz
Use the graph to solve this problem. How many more boys than girls chose watching TV as their favorite activity?
Problem of the Day
Mr. Thomas sees a clock behind him with painted marks instead of numbers. The clock hands show 10:00. After 3 hours, the hands point to 7:00. How can this be?

Quick Review
Write the next 3 numbers in each pattern.
1. 7, 14, 21, 28, . . .
2. 130, 150, 170, 190, . . .
3. 430, 405, 380, 355, . . .

Lesson Quiz
Use the histogram to solve this problem.
How many karate students were less than 11 years old?
**Problem of the Day**
In the problem below, the letters $A–E$ stand for the digits 0–4, but not in that order. Replace the numbers with the digits to make a true number sentence.

$ABC \times D = DAE$

**Quick Review**
1. $90 \times 6 = a$
2. $2,000 \times 8 = t$
3. $50 \times 400 = p$
4. $7,000 \times 5 = y$
5. $8,000 \times 8 = j$

**Lesson Quiz**
Use the graph to solve the problem.
At the end of 2 hours, what was the difference in distance biked by Nell and Jose?
Problem of the Day
Juan is able to sell $100 worth of merchandise in 2 hours. At this rate, how many dollars worth of merchandise will Juan sell in 8 hours?

Quick Review
1. $270 - j = 210$
2. $360 + m = 560$
3. $s \times 80 = 480$
4. $450 \div a = 90$
5. $n + 400 = 955$

Lesson Quiz
Choose an appropriate graph for the data. Explain your choice.

<table>
<thead>
<tr>
<th>Years Working at Company</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–9</td>
<td>20</td>
</tr>
<tr>
<td>10–19</td>
<td>12</td>
</tr>
<tr>
<td>20–29</td>
<td>8</td>
</tr>
</tbody>
</table>
Problem of the Day
Michelle has 9 bills in her wallet. She has a total of $30. What bills are in her wallet?

Quick Review
Complete each pattern.
1. 20, ___, 28, 32, ___, 40
2. 150, ___, 200, 225, 250
3. 27, 36, ___, 54, ___, 72
4. 150, 120, ___, 60, 30

Lesson Quiz
The average home prices for 3 years were $100,000, $103,000, and $105,000. To make the increase seem as great as possible, which scale might a realtor use?
A a scale from $0 to $110,000 in intervals of $10,000;
B a scale with a zigzag line of 1 unit from $0 to $100,000, then intervals of $1,000 from $100,000 to $105,000
Problem of the Day
Tom, Lori, Sam, and Kerri are the first four finishers in a race. Tom is not first or second. Lori is not first. Kerri is behind Tom. Write the names in order from first place finisher to fourth place finisher.

Quick Review
Write >, <, or = for each □.
1. 73 □ 908
2. 34,808 □ 100,805
3. 9,190 □ 9,185
4. 27,423 □ 27,361
5. 1,679 □ 1,488

Lesson Quiz
Use the graph to solve the problem.
Which grade voted against school uniforms?
**Problem of the Day**
Al is twice as old as Mia. The sum of their ages is 42. What are their ages?

**Quick Review**
1. $79 - 54 = h$
2. $408 + 965 = a$
3. $254 + 3,117 = d$
4. $4,194 - 759 = j$

**Lesson Quiz**
The table shows results of a survey. Use the table to solve the problem.

What Did You Wear to School Today?

<table>
<thead>
<tr>
<th>Footwear Worn</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoes</td>
<td></td>
</tr>
<tr>
<td>Sneakers</td>
<td></td>
</tr>
<tr>
<td>Boots</td>
<td></td>
</tr>
</tbody>
</table>

How many students were in the survey?
Problem of the Day
Thursday’s high temperature was 6° warmer than Tuesday’s high temperature, and 15° cooler than twice Monday’s low temperature. Monday’s low temperature was 43°F. What was the high temperature on Tuesday?

Quick Review
1. $25 + 9 + 7 + 11$
2. $14 + 89 + 35$
3. $108 + 64 + 79 + 57$
4. $159 + 224 + 177$
5. $27 + 19 + 8 + 30 + 42$

Lesson Quiz
Find the mean, median, mode, and range.
1. 7, 9, 6, 1, 15, 18, 6, 12, 7, 7, 11, 9
2. 45, 59, 81, 72, 60, 29, 45, 83, 39
3. 16, 2, 15, 9, 12, 8, 9, 15, 3, 11
Problem of the Day
Aretha works part-time. She earned $336 for 2 weeks of work. If she works 3 hours each weekday and 6 hours on Saturdays, what is her hourly pay?

Quick Review
Write the expanded form.
1. 1,730
2. 5,010
3. 203,001
4. 519,005

Lesson Quiz
Use the stem and leaf plot to answer the questions.
1. How many test scores are shown?
2. Find the range of the test scores.

Ted’s Test Scores

<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>3 5 6</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
</tr>
</tbody>
</table>

8 | 1 3 means 83
Problem of the Day
The range of a set of 3 numbers is 9. The median is 14. One of the numbers is 6. What is the other number?

Quick Review
Compare. Write >, <, or = for ●.
1. 27,061 ● 190,600
2. 38,520 ● 38,496
3. 1,745 ● 2,060
4. 114,555 ● 112,301

Lesson Quiz
Make a table to solve the problem.
Students in one class recorded the number of minutes they read in a night. The results are shown below. Did most of the students spend 0–29 minutes, 30–59 minutes, 60–89 minutes, or more than 90 minutes reading?
24, 35, 64, 58, 92, 47, 64, 27, 38, 42, 16, 62, 27, 48, 71, 25, 12, 108, 21, 45, 80, 51, 37, 22
Problem of the Day
Pens come in packs of 6, 8, and 10. How many ways are there to buy 40 pens?

Quick Review
1. 64 ÷ 4
2. 888 ÷ 12
3. 405 ÷ 15
4. 256 ÷ 8

Lesson Quiz
Use the table to solve.
The table shows how long people waited when they called a computer help line. Use the mean, median, or mode to describe the typical waiting time.

<table>
<thead>
<tr>
<th>Minutes Spent Waiting</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 13 10 3 13 11 12 14</td>
</tr>
</tbody>
</table>
Problem of the Day
In a three-digit number, the ones digit is the greatest digit possible, the tens digit is 3 less than the ones digit, and the hundreds digit is half the tens digit. What is the number?

Quick Review
Find the missing factor.
1. $9 \times \_ = 54$
2. $\_ \times 5 = 35$
3. $7 \times \_ = 56$
4. $\_ \times 6 = 24$

Lesson Quiz
Write all the factors of each number. Then identify the number as a prime number or a composite number.
1. 18
2. 19
3. 20
4. 21
Problem of the Day
If you want to buy the greatest possible number of 37-cent stamps using a $5 bill, how many stamps could you buy? How much change would you receive?

Quick Review
Identify each number as prime or composite.
1. 27
2. 39
3. 23
4. 17
5. 15

Lesson Quiz
Write the prime factorization of each number.
If possible, use exponents.
1. 40
2. 21
3. 45
4. 30
5. 25
Problem of the Day
Saroya picked two pumpkins. One was twice as heavy as the other. Their total weight was 24 lb. How much did each pumpkin weigh?

Quick Review
Write the prime factorization of each number. Use exponents.
1. 20
2. 32
3. 48
4. 27

Lesson Quiz
Find the greatest common factor of each pair of numbers.
1. 12, 30
2. 21, 45
3. 18, 54
4. 50, 60
5. 35, 70
Problem of the Day
How can decimal points be placed in these numbers so that they are in order from least to greatest? 555, 444, 333, 222

Quick Review
Find the GCF of each number pair.
1. 15, 40
2. 12, 11
3. 56, 35
4. 48, 24
5. 12, 14

Lesson Quiz
Find the LCM of each number pair.
1. 5, 6
2. 4, 12
3. 10, 15
4. 8, 20
5. 7, 23
Problem of the Day
Together, Darla and Tiffany packed 53 boxes of food for a soup kitchen. Tiffany packed 3 more boxes than Darla. How many boxes did each girl pack?

Quick Review
Write each fraction.
1. five eighths
2. seven tenths
3. one fourth
4. two twelfths
5. ten thirteenth

Lesson Quiz
Write each mixed number as an improper fraction.
1. $3\frac{1}{8}$
2. $7\frac{1}{2}$
3. $5\frac{2}{3}$
4. $10\frac{3}{4}$
5. $9\frac{3}{8}$
Problem of the Day
Elena has a 5-ft long ribbon. How many cuts must she make to cut the ribbon into 6 equal pieces? What fraction of the whole ribbon is each piece? How many inches long is each piece?

Quick Review
Find the GCF of each number pair.
1. 15, 6
2. 4, 16
3. 10, 45
4. 24, 30
5. 18, 21

Lesson Quiz
Write each fraction in simplest form.
1. \( \frac{12}{18} \) \hspace{2cm} 2. \( \frac{15}{20} \)
3. \( \frac{21}{24} \) \hspace{2cm} 4. \( \frac{36}{72} \)
5. \( \frac{16}{20} \)
Problem of the Day
Mr. Ng placed a catalog order of 2 sweaters at $25.99 each, 3 shirts at $18.49 each, and a pair of gloves at $7.88. Shipping costs were $5.95. How much did Mr. Ng pay for his order?

Quick Review
Write the LCM of each number pair. Then write the GCF.
1. 5, 7
2. 8, 10
3. 6, 15
4. 9, 30

Lesson Quiz
Use logical thinking to solve each problem.
1. The LCM of two numbers is 60. Their GCF is 2. The sum of the numbers is 22. What are the numbers?
2. Fraction \( \frac{a}{b} \) is equivalent to \( \frac{7}{8} \), and \( a + b = 45 \). Find fraction \( \frac{a}{b} \).
Problem of the Day
Bob can weed 3 rows of beans in one hour. Jay can weed 2 rows of beans in one hour. If they begin weeding at the same time, in how many hours will they weed 20 rows of beans?

Quick Review
Write three equivalent fractions for each.

1. \( \frac{2}{3} \)
2. \( \frac{4}{5} \)
3. \( \frac{3}{4} \)
4. \( \frac{1}{7} \)

Lesson Quiz
Write each fraction as a decimal.

1. \( \frac{4}{5} \)
2. \( \frac{7}{20} \)
3. \( 6 \frac{6}{50} \)
4. \( 7 \frac{1}{25} \)
5. \( \frac{1}{4} \)
Problem of the Day
Complete two number sentences in order to make
the greatest and least possible products, using each
of these digits: 5, 6, 7, and 9.

Quick Review
Write each fraction in simplest form.

1. \( \frac{20}{35} \)
2. \( \frac{28}{40} \)
3. \( \frac{24}{36} \)
4. \( \frac{12}{48} \)
5. \( \frac{16}{40} \)

Lesson Quiz
Order each set of numbers from least to greatest.

1. 1.35, 1\( \frac{3}{4} \), 18\( \frac{1}{12} \), 0.1
2. \( \frac{5}{8}, \frac{3}{4}, \frac{7}{12}, 0.6 \)
3. \( \frac{1}{2}, \frac{4}{20}, \frac{7}{8}, \frac{3}{10} \)
4. 2.5, 2.05, 2\( \frac{3}{5} \), 2\( \frac{3}{10} \)
Problem of the Day
The GCF of two numbers is 3. The LCM of the two numbers is 30. If you multiply the numbers, the product is 90. What are the numbers?

Quick Review
Write $>$, $<$, or $=$ for each $\square$.
1. $\frac{2}{3} \square \frac{8}{12}
2. \frac{5}{7} \square 0.5
3. $2\frac{3}{8} \square 2\frac{3}{4}$
4. $3.4 \square 3\frac{1}{4}$
5. $\frac{20}{16} \square 1\frac{1}{5}$

Lesson Quiz
Estimate the sum or difference.
1. $41\frac{7}{8} + 32\frac{1}{4}$
2. $\frac{9}{10} + \frac{3}{5} + \frac{4}{5}$
3. $67\frac{1}{2} - 22\frac{1}{4}$
4. $\frac{7}{8} - \frac{1}{15}$
5. $\frac{3}{4} + \frac{5}{6} + \frac{1}{8}$
Problem of the Day
An even number less than 50 is a multiple of 2, 4, 6, and 8. The sum of its digits is greater than 10. What is the number?

Quick Review
Write each in simplest form.

1. \( \frac{10}{15} \)
2. \( \frac{6}{15} \)
3. \( \frac{9}{9} \)
4. \( \frac{8}{12} \)
5. \( \frac{6}{20} \)

Lesson Quiz
Add. Write each sum in simplest form.

1. \( \frac{4}{5} + \frac{3}{5} \)
2. \( \frac{3}{4} + \frac{3}{4} \)
3. \( \frac{5}{8} + \frac{6}{8} \)
4. \( \frac{1}{8} + \frac{3}{8} \)
5. \( \frac{7}{12} + \frac{8}{12} \)
Problem of the Day
Keisha opens a book. The sum of the left-hand page number and the right-hand page number is 313. What are the page numbers?

Quick Review
Find the missing number.

1. \( \frac{3}{5} = \frac{\square}{20} \)
2. \( \frac{7}{\square} = \frac{21}{36} \)
3. \( \frac{5}{6} = \frac{25}{\square} \)
4. \( \frac{11}{6} = 1\frac{\square}{6} \)
5. \( \frac{15}{6} = 2\frac{\square}{\square} \)

Lesson Quiz
Add. Write each sum in simplest form.

1. \( \frac{3}{8} + \frac{5}{6} \)
2. \( \frac{4}{5} + \frac{3}{10} \)
3. \( \frac{2}{3} + \frac{1}{9} \)
4. \( \frac{3}{4} + \frac{3}{10} \)
5. \( \frac{7}{8} + \frac{11}{12} \)
Problem of the Day
Tai is twice as old as Miyoshi. Tai is half as old as Larry. Miyoshi is 10 years old. How old is Larry?

Quick Review
Find the LCM of each number pair.
1. 8 and 16
2. 10 and 4
3. 9 and 5
4. 6 and 8
5. 18 and 12

Lesson Quiz
Add. Write each sum in simplest form.
1. \(2\frac{2}{3} + 4\frac{1}{6}\)
2. \(8\frac{3}{4} + 5\frac{5}{8}\)
3. \(5\frac{1}{2} + 3\frac{9}{10}\)
4. \(9\frac{4}{5} + 6\frac{5}{8}\)
5. \(3\frac{7}{8} + 4\frac{9}{12}\)
Problem of the Day
Lupe’s science test scores were 92, 87, 93, 94, 88, and 91. After her test today, the mode is now 94. What is her median score after today’s test?

Quick Review
Add. Write the sum in simplest form.

1. \(1\frac{2}{5} + 2\frac{2}{5}\) 
2. \(\frac{3}{8} + \frac{7}{8}\)
3. \(\frac{7}{10} + 2\frac{4}{10}\) 
4. \(\frac{11}{12} + \frac{13}{12}\)
5. \(4\frac{1}{4} + 3\frac{1}{4}\)

Lesson Quiz
Subtract. Write the difference in simplest form.

1. \(\frac{7}{10} - \frac{3}{10}\)
2. \(5 - 2\frac{3}{4}\)
3. \(4\frac{5}{8} - \frac{3}{8}\)
4. \(\frac{11}{12} - \frac{3}{12}\)
5. \(10\frac{1}{6} - \frac{5}{6}\)
Problem of the Day
Four students live on the same street. Andy lives east of Bao. Chico lives west of Bao. Dylan’s house is between Chico’s and Bao’s houses. In what order, from west to east, are their houses?

Quick Review
Find the LCD of each pair of fractions.
1. \(\frac{3}{5}\) and \(\frac{7}{10}\)
2. \(\frac{1}{4}\) and \(\frac{2}{9}\)
3. \(\frac{3}{4}\) and \(\frac{1}{3}\)
4. \(\frac{4}{5}\) and \(\frac{2}{3}\)
5. \(\frac{3}{8}\) and \(\frac{1}{6}\)

Lesson Quiz
Subtract. Write the difference in simplest form.
1. \(\frac{7}{8} - \frac{1}{6}\)
2. \(\frac{2}{3} - \frac{2}{8}\)
3. \(\frac{9}{10} - \frac{2}{5}\)
4. \(\frac{3}{4} - \frac{1}{3}\)
5. \(\frac{10}{12} - \frac{4}{6}\)
Problem of the Day
A rectangle is $3\frac{2}{3}$ yd long. Its width is $1\frac{1}{2}$ yd shorter than its length. What is the perimeter of the rectangle?

Quick Review
Add. Write the sum in simplest form.

1. $\frac{2}{3} + \frac{3}{4}$
2. $6\frac{7}{8} + 4\frac{3}{8}$
3. $5\frac{4}{5} + 2\frac{5}{6}$
4. $7\frac{1}{2} + 7\frac{9}{10}$
5. $6\frac{3}{4} + 7\frac{7}{12}$

Lesson Quiz
At an art exhibit, $\frac{7}{8}$ of the paintings were still lifes and landscapes. There were $\frac{3}{8}$ more still lifes than landscapes. What fraction in simplest form represents the number of still lifes? the landscapes?
Problem of the Day
Brooke and Harry built a birdhouse. Brooke worked on the birdhouse for \(3\frac{1}{2}\) hours in the morning and Harry worked on it in the afternoon for \(\frac{3}{4}\) of an hour longer than Brooke. How much time did it take them to build the birdhouse?

Quick Review
Write the sum in simplest form.

1. \(\frac{1}{2} + \frac{5}{8}\)  
2. \(\frac{6}{10} + \frac{2}{6}\)
3. \(\frac{4}{5} + \frac{1}{3}\)  
4. \(\frac{3}{10} + \frac{2}{3}\)
5. \(\frac{5}{6} + \frac{10}{12}\)

Lesson Quiz
Subtract. Write each answer in simplest form.

1. \(5\frac{1}{3} - 3\frac{1}{6}\)  
2. \(8\frac{1}{4} - 5\frac{1}{2}\)
3. \(6\frac{2}{8} - 1\frac{3}{12}\)  
4. \(7\frac{2}{3} - 3\frac{7}{8}\)
Problem of the Day
Adrian has 5 coins in his pocket that have a total value of $0.60. What coins are in his pocket?

Quick Review
Add or subtract.
1. $4.78 − $3.52
2. $7.35 + $2.50
3. $5.72 + $6.39
4. $10.00 − $2.45
5. $6.07 − $1.55

Lesson Quiz
Change each decimal to a fraction. Write each sum or difference as a decimal.
1. 0.25 + 0.45
2. 3.6 + 4.2
3. 0.78 − 0.33
4. 9.29 − 5.08
Problem of the Day
What are the next three numbers in this pattern? 3, 5, 9, 17, 33

Quick Review
Write <, >, or = for each .
1. 7.02 7.20
2. 83.74 83.47
3. 15.9 15.7
4. 128.8 128.80
5. 36.507 36.750

Lesson Quiz
Add.
1. 0.456 + 2.39 + 7.7
2. 72.34 + 48.311 + 8.49
3. $103.75 + $99.08
4. 55 + 1.203 + 0.67
5. 0.8 + 0.18 + 0.188
Problem of the Day
The Johnson children are Kyle, Kate, Karen, and Kevin. Kyle is not the oldest or youngest. Karen is older than Kevin and Kyle, but not as old as Kate. List the children’s names from oldest to youngest.

Quick Review
Change each decimal to a fraction. Write each sum or difference as a decimal.
1. $0.4 + 0.7$
2. $3.5 - 1.2$
3. $0.68 + 0.56$
4. $5.33 - 4.77$

Lesson Quiz
Subtract. Add to check your answer.
1. $5.89 - 3.45$
2. $7.8 - 4.32$
3. $19.3 - 5.421$
4. $8 - 0.754$
5. $52.5 - 26.75$
Problem of the Day
Mrs. Chan sold 1 dozen roses to each of 4 customers, 1 rose to each of 15 customers, and bouquets of 4 roses each to 6 customers. She was left with 5 roses. How many did she start with?

Quick Review
Add or subtract.
1. $3.9 + 6.75$
2. $10.4 - 2.991$
3. $38.42 - 9.6$
4. $15 + 1.5 + 0.15$

Lesson Quiz
Estimate each sum or difference to the nearest whole number.
1. $34.78 + 45.02$
2. $67.56 - 33.49$
3. $5.399 + 10.486$
4. $123.71 - 98.64$
Problem of the Day
A prime number less than 50 is 6 greater than the prime number just before it and 4 less than the prime number just after it. What is the prime number?

Quick Review
Add.
1. $3.59 + 0.27$
2. $8.4 + 7.31 + 11.7$
3. $0.072 + 0.75 + 0.725$
4. $45.9 + 71.08$

Lesson Quiz
Solve. Explain which method you used.
1. A carton contains two boxes of office supplies. One box weighs 1.58 kg, the other weighs 2.67 kg. What does the carton weigh?
2. At 7:00 A.M. the temperature is 21.7°C. By noon it has risen 1.3°C. What is it at noon?
Problem of the Day
What are the next two fractions in this pattern? Describe the pattern. \( \frac{5}{12}, \frac{1}{2}, \frac{7}{12}, \frac{2}{3}, \ldots \)?

Quick Check
Simplify.

1. \( \frac{3}{5} + \frac{1}{5} = ? \)
2. \( \frac{1}{2} + \frac{1}{2} = ? \)
3. \( \frac{4}{9} + \frac{2}{9} = ? \)
4. \( \frac{8}{12} + \frac{3}{12} = ? \)
5. \( \frac{1}{8} + \frac{5}{8} = ? \)
6. \( \frac{7}{10} + \frac{13}{10} = ? \)

Lesson Quiz
Use models to find each product.

1. \( \frac{3}{4} \times \frac{2}{5} \)
2. \( \frac{2}{3} \times \frac{3}{4} \)
3. \( \frac{1}{3} \times \frac{1}{6} \)
4. \( 2 \times \frac{1}{3} \)
5. \( 3 \times 1\frac{3}{8} \)
Problem of the Day
Troy spent one half hour studying math and one third of an hour studying spelling. How many minutes did he study in all?

Quick Review
Multiply.
1. \(5 \times 9\)
2. \(8 \times 7\)
3. \(4 \times 9\)
4. \(7 \times 9\)
5. \(9 \times 9\)

Lesson Quiz
Multiply. Write your answer in simplest form.
1. \(\frac{1}{3} \times \frac{3}{8}\)
2. \(\frac{3}{4} \times \frac{4}{9}\)
3. \(\frac{5}{6} \times \frac{1}{3}\)
4. \(4 \times \frac{5}{8}\)
5. \(3 \times \frac{1}{6}\)
Problem of the Day
Linus has $\frac{1}{3}$ of $\frac{3}{4}$ of a dollar. Fiona has $\frac{3}{5}$ of $\frac{1}{2}$ of a dollar. Who has more money? Explain.

Quick Review
Write each improper fraction as a mixed number.

1. $\frac{11}{4}$
2. $\frac{8}{5}$
3. $\frac{9}{3}$
4. $\frac{17}{4}$
5. $\frac{22}{3}$

Lesson Quiz
Multiply. Write each product in simplest form.

1. $\frac{3}{5} \times 1\frac{1}{4}$
2. $3 \times 2\frac{1}{3}$
3. $4 \times 1\frac{2}{5}$
4. $1\frac{1}{2} \times 2\frac{1}{6}$
5. $1\frac{4}{5} \times 1\frac{2}{3}$
Problem of the Day
I am an improper fraction. The two digits in my numerator are the same as the two digits in my denominator, but in reverse order. As a mixed number in simplest form, I am $1\frac{3}{4}$. What fraction am I?

Quick Review
Find the product.
1. $2 \times \frac{1}{2}$
2. $5 \times \frac{1}{5}$
3. $7 \times \frac{1}{7}$
4. $8 \times \frac{1}{8}$
5. $9 \times \frac{1}{9}$

Lesson Quiz
Divide. Check your answers.
1. $\frac{2}{3} \div \frac{1}{3}$
2. $\frac{5}{8} \div \frac{1}{8}$
3. $4 \div \frac{1}{4}$
4. $3 \div \frac{1}{4}$
5. $2 \div \frac{1}{6}$
Problem of the Day
Megan is deciding on an outfit to wear. She can choose between black, tan, or grey pants; a red or blue shirt, and brown or black shoes. How many different combinations can she choose from?

Quick Review
Write the value of \( n \).
1. \( \frac{3}{n} \times 4 = 3 \)
2. \( \frac{n}{3} \times 6 = 4 \)
3. \( \frac{1}{2} \times n = 6 \)
4. \( \frac{5}{n} \times 10 = 10 \)

Lesson Quiz
Divide. Write each answer in simplest form.
1. \( 2 \div \frac{1}{7} \)
2. \( \frac{3}{4} \div 6 \)
3. \( \frac{5}{6} \div 10 \)
4. \( \frac{4}{5} \div 8 \)
5. \( \frac{2}{3} \div \frac{1}{4} \)
Problem of the Day
I am a mixed number in simplest form. My reciprocal is \(\frac{2}{9}\).

Quick Review
Write the GCF of each pair of numbers.

1. 9, 27
2. 11, 17
3. 12, 36
4. 18, 21
5. 25, 30

Lesson Quiz
Write each quotient in simplest form.

1. \(1\frac{3}{5} ÷ 2\frac{2}{5}\)
2. \(3\frac{1}{8} ÷ 1\frac{1}{4}\)
3. \(14 ÷ 1\frac{2}{5}\)
4. \(1\frac{1}{3} ÷ 2\frac{1}{6}\)
5. \(8\frac{2}{5} ÷ 4\frac{1}{5}\)
Problem of the Day
Toni drew three line segments. The red segment is $\frac{3}{16}$ in. shorter than the green one and $\frac{2}{3}$ as long as the yellow segment. The yellow segment is $\frac{3}{4}$ in. long. How long is the green segment?

Quick Review
Find the product or quotient.

1. $5 \times \frac{4}{5}$
2. $36 \div \frac{3}{8}$
3. $48 \div \frac{3}{4}$
4. $\frac{1}{4} \times \frac{12}{18}$
5. $2\frac{1}{4} \div \frac{3}{5}$

Lesson Quiz
Solve.
Gina spends $\frac{3}{8}$ of her monthly salary on transportation and food. She spends $\frac{1}{2}$ of it on housing expenses. If her salary is $2,400 a month, how much does she spend on these expenses? How much does she have left?
Problem of the Day
Rhea saved up $35. She spent \( \frac{1}{5} \) of that amount on a gift. How much did she spend? Sam said that the money she spent was \( \frac{1}{4} \) of his savings. How much does Sam have in savings?

Quick Review
Multiply.
1. \( 50 \times 9 \)
2. \( 50 \times 10 \)
3. \( 50 \times 11 \)
4. \( 50 \times 12 \)

Lesson Quiz
Use models or fractions to multiply. Write each product as a decimal.
1. \( 0.2 \times 0.6 \)
2. \( 0.3 \times 0.7 \)
3. \( 0.6 \times 0.7 \)
4. \( 0.8 \times 0.4 \)
5. \( 0.5 \times 0.5 \)
Problem of the Day
Amanda has followed a pattern for saving money each week for one year. In Week 1, she saved $1.00; in Week 2, $1.60; in Week 3, $2.20, and in Week 4, $2.80. During which weeks will she save $6.40; $8.80?

Quick Review
Multiply mentally.
1. $2 \times 5 \times 7$
2. $5 \times 18 \times 0$
3. $10 \times 1 \times 4$
4. $5 \times 4 \times 8$
5. $25 \times 6 \times 4$

Lesson Quiz
Find each product.
1. $2 \times 2.5$
2. $3 \times 3.5$
3. $6 \times 2.48$
4. $8 \times 9.145$
5. $4 \times 3.561$
Problem of the Day
A number is doubled and then increased by 300. Then 50 is subtracted from the result. The final number is 404. Find the original number.

Quick Review
Estimate the product.
1. $61 \times 44$
2. $619 \times 8$
3. $240 \times 12$
4. $41 \times 58$
5. $82 \times 29$

Lesson Quiz
Estimate each product.
1. $0.41 \times 27$
2. $9 \times 0.221$
3. $6 \times 6.55$
4. $52 \times 4.145$
5. $40 \times 7.41$
Problem of the Day
The sum of four decimals is 9. Each decimal is 0.5 greater than the previous decimal. What are the decimals?

Quick Review
Add mentally.
1. 20 + 40 + 80
2. 50 + 60 + 40
3. 60 + 90 + 40
4. 90 + 900 + 3,000
5. 500 + 4,000 + 500

Lesson Quiz
Multiply.
1. 0.5 \times 0.6
2. 0.8 \times 0.2
3. 0.32 \times 0.4
4. 4.7 \times 2.1
5. 1.75 \times 7.2
Problem of the Day
The product of 0.4 and another decimal is greater than 0.3 but less than 0.4. What are the least and greatest decimals, to the nearest hundredth, for the other factor?

Quick Review
Estimate the product.
1. 6.1 × 4.2
2. 1.9 × 8
3. 0.24 × 8
4. 5.1 × 5.8
5. 0.49 × 0.29

Lesson Quiz
Multiply.
1. 0.4 × 0.2
2. 0.5 × 0.5
3. 0.9 × 0.2
4. 0.03 × 0.3
5. 0.04 × 0.03
6. 40 × 7.51
Problem of the Day
The product of two whole numbers is 40. If 12 is added to the first and 8 is added to the second, the new product is 260. What are the two numbers?

Quick Review
Find the product.
1. $0.5 \times 0.4$
2. $0.04 \times 0.8$
3. $0.24 \times 0.3$
4. $14 \times 0.4$
5. $0.6 \times 6$

Lesson Quiz
Solve. Explain why the answer is reasonable or unreasonable.
Nia earns $48. She plans to save 0.4 of it.
She says that means she can save $1.92.
Is this reasonable?
Problem of the Day
Phoebe has a savings plan. She wants to save $2.00 more each week than she saved the previous week. She saved $2 the first week. How much will she save in the fifth week if she continues with her plan? How much will she have saved in all after 5 weeks?

Quick Review
Multiply.
1. \(0.5 \times 80\)
2. \(0.8 \times 1.2\)
3. \(0.4 \times 88\)
4. \(0.7 \times 2.4\)

Lesson Quiz
Model the division. Write the quotient in decimal form.
1. \(10 \div 0.5\)
2. \(8 \div 0.25\)
3. \(6 \div 0.6\)
4. \(9 \div 0.3\)
5. \(10 \div 0.4\)
Problem of the Day
A number is divided by 4 and then increased by 160. Then 40 is subtracted from the result. The final number is 320. Find the original number.

Quick Review
Estimate the quotient.
1. $\frac{61}{18}$
2. $\frac{615}{9}$
3. $\frac{242}{12}$
4. $\frac{482}{6}$
5. $\frac{886}{29}$

Lesson Quiz
Estimate the quotient by using compatible numbers.
1. $\frac{58}{0.47}$
2. $\frac{95}{0.241}$
3. $\frac{8}{0.19}$
4. $\frac{52}{0.54}$
5. $\frac{4.9}{0.22}$
Problem of the Day
Without using exponents, what is the greatest number you can make using two different operations, and the numbers 5, 20, and 30?

Quick Review
Choose the greater product.
1. 52 \times 10 \text{ or } 5.2 \times 1,000
2. 0.6 \times 1,000 \text{ or } 60 \times 100
3. 380 \times 0.1 \text{ or } 3,800 \times 0.01
4. 6,400 \times 0.1 \text{ or } 6.4 \times 1,000

Lesson Quiz
Multiply or divide by using patterns.
1. 6.88 \times 10^1
2. 9.32 \times 10^2
3. 8.5 \times 10^3
4. 3.5 \div 10^1
5. 76 \div 10^2
Problem of the Day
What are the next two numbers in the sequence?
Describe the pattern of the sequence.
1, 4, 2, 8, 4, 16, 8, ?, ?, . . .

Quick Review
Divide.
1. \(350 \div 10\)
2. \(625 \div 25\)
3. \(480 \div 12\)
4. \(1,600 \div 20\)
5. \(228 \div 4\)

Lesson Quiz
Divide and check.
1. \(7 \div 8.4\)
2. \(6 \div 5.4\)
3. \(3 \div 34.2\)
4. \(11 \div 78.1\)
5. \(6 \div 10.8\)
Problem of the Day
Four students are waiting in line in the cafeteria. Maria is directly behind Brad. Kevin is not first in line but is directly in front of Aretha. In which order are the four students standing in line?

Quick Review
Estimate the quotients to the nearest ten or hundred.

1. $3\sqrt{899}$
2. $4\sqrt{218}$
3. $7\sqrt{1,350}$
4. $6\sqrt{2,990}$
5. $5\sqrt{4,625}$

Lesson Quiz
Divide. Check using a calculator or estimation.

1. $5\sqrt{3.6}$
2. $4\sqrt{6.5}$
3. $6\sqrt{43.2}$
4. $8\sqrt{6.8}$
5. $5\sqrt{28.15}$
Problem of the Day
Four friends buy a pizza for $13 and divide the cost equally. How many one-dollar bills and quarters can each friend use to pay for the pizza?

Quick Review
Multiply mentally.
1. $35 \times 10^3$
2. $0.3 \times 10^2$
3. $75.9 \times 10$
4. $0.08 \times 10^3$
5. $0.0462 \times 10^3$

Lesson Quiz
Change each fraction to decimal form.
1. $\frac{1}{9}$
2. $\frac{4}{11}$
3. $\frac{2}{15}$
4. $\frac{5}{6}$
5. $\frac{5}{18}$
Problem of the Day
Jason had scores of 75, 88, 96, 75, and 92 on his science tests this semester. What are the range, mode, median, and mean of these scores?

Quick Review
Divide mentally.
1. 560 ÷ 70
2. 72,000 ÷ 8
3. 81,000 ÷ 90
4. 6,300 ÷ 90
5. 40,000 ÷ 800

Lesson Quiz
Divide. Check that your answers are reasonable.
1. 0.4)1.6
2. 0.4)0.24
3. 0.5)43.5
4. 0.5)4.35
5. 4.5)35.1
Problem of the Day
Frannie speedwalks 0.3 miles every day. Alma speedwalks \( \frac{3}{8} \) miles every day. Who speedwalks the greater distance? How much greater?

Quick Review
Find the quotient.
1. \( 16.25 \div 5 \)
2. \( 3.32 \div 0.8 \)
3. \( 50.85 \div 9 \)
4. \( 118.5 \div 15 \)
5. \( 91.875 \div 10.5 \)

Lesson Quiz
Solve.
1. The Youth Center orders 18 basketballs. The basketballs are shipped 8 to a carton. How many cartons will be needed for the shipment?
2. A team orders 9 pairs of shorts. The cost is $67.50. What does each pair cost?
Problem of the Day
Five points are scattered in a plane. No three points lie on the same line. How many lines can you draw through them?

Quick Review
Identify each as either a “whole number,” “fraction or whole number,” or “a mixed number.”

1. $\frac{12}{3}$
2. 7,345
3. $\frac{13}{5}$
4. $\frac{6}{6}$

Lesson Quiz
Use the diagram to answer the questions.

1. Name a pair of parallel lines.
2. Name a pair of intersecting lines.
3. Name a line segment with endpoint $F$. 
Problem of the Day
Draw a line with points A, B, C, and D on it in order from left to right. How many rays do these points determine? Name the rays.

Quick Review
1. $4.5 \times 10^3$
2. $0.8 \times 10^5$
3. $6,700 \div 10^4$
4. $900 \div 10^4$
5. $0.03 \times 10^5$
6. $1,300 \div 10^2$
7. $3.2 \times 10^4$
8. $7.3 \times 10^2$

Lesson Quiz
1. Classify an angle with the measure $20^\circ$.
2. Draw an angle with the measure $45^\circ$. Classify the angle.
3. Use symbols to write this angle in two ways. Classify the angle.
Problem of the Day
The sum of three numbers is 180. Two of the numbers are equal. The third number is the sum of the other two numbers. What are the three numbers?

Quick Review
Find the value of each expression.
1. \(180 - (60 + 45)\)
2. \(180 - 30 - 30\)
3. \(180 - 62, \text{ then } - 65\)
4. 180 less the sum of 70 and 40

Lesson Quiz
Classify each triangle in two ways by the measures of their sides and angles.

1. \(\text{44}^\circ \text{, 44}^\circ \text{, and 92}^\circ\)
2. \(4.5, 4.5, \text{ and } 4.5\)
3. \(\text{44}^\circ \text{, 44}^\circ \text{, and } 92^\circ\)
Problem of the Day
Continue the pattern below horizontally to help you solve the problem.
How many triangles can you make with 31 equal line segments?

<table>
<thead>
<tr>
<th>Number of Line Segments</th>
<th>Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>△</td>
</tr>
<tr>
<td>5</td>
<td>△ △</td>
</tr>
<tr>
<td>7</td>
<td>△ △ △</td>
</tr>
<tr>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

Quick Review
Write each expression in symbols.
1. angle $A$
2. line segment $LM$
3. ray $PQ$

Lesson Quiz
1. How can you tell if two squares are congruent?
2. Are all equilateral triangles congruent?
Problem of the Day
How many squares of all sizes are in the figure at the left? in the figure at the right?

Quick Review
Classify a triangle using the descriptions given for each.
1. all sides the same length
2. has a right angle
3. has one obtuse angle
4. has 40°, 70°, and 70° angles

Lesson Quiz
1. Classify the figure at the right in three ways.

2. Find the measure of the fourth angle in the figure at the right.
Problem of the Day
Suppose that four points lie in a plane and no three of them lie along a line. Using line segments to connect the points, how many angles do these points determine?

Quick Review
Solve the following problems.
1. \( \frac{1}{2} \times \frac{2}{3} \)
2. \( \frac{4}{5} \times \frac{5}{8} \)
3. \( \frac{9}{16} \times \frac{4}{27} \)
4. \( \frac{7}{21} \times \frac{4}{20} \)
5. \( \frac{7}{10} \times 100 \)
6. \( 0 \times \frac{1}{3} \)

Lesson Quiz
1. Identify the transformation of the triangle.

2. Copy the figure. Translate it 4 units right and 2 units down.
Problem of the Day
How many dots would appear in the twentieth diagram in this geometric pattern?

Diagram 1    Diagram 2    Diagram 3

Quick Review
Write each percent as a fraction in simplest form.

1. 60%
2. 1%
3. 10%
4. 43%
5. 11%
6. 100%
7. 50%
8. 79%

Lesson Quiz
Problem of the Day
Classify the angles named as acute, obtuse, or right and find their measure.
1. $\angle DAC$
2. $\angle DAB$
3. $\angle CAB$

Quick Review
1. $1.89 - 0.439$
2. $2.63 - 1.507$
3. $0.598 - 0.31$
4. $0.972 - 0.48$

Lesson Quiz
Classify: radius, diameter, chord, central angle. More than one term may apply.
1. $\overline{ZW}$
2. $\overline{ZO}$
3. $\angle TOW$
4. $\overline{ZP}$
Problem of the Day
Use the figure to answer the question. How many shaded squares would appear in the fourth and fifth diagram in the pattern?

Quick Review
Choose the greater number in each pair.
1. 0.35 or 0.53
2. 4.8 or 4.08
3. 6.07 or 6.04
4. 0.097 or 0.32

Lesson Quiz
Use the figure to answer.
1. Does it have rotational symmetry? How many degrees do you turn it to find out?
2. Does it have line symmetry? Sketch the lines of symmetry.
Problem of the Day
Farmer Brown has 12 chickens and pigs. In all, the animals have 28 legs. How many chickens and how many pigs does Farmer Brown have?

Quick Review
1. How many feet are in 2 yards?
2. How many inches are in 4 feet?
3. How many inches are in 1.5 feet?
4. How many inches are in 0.25 yards?

Lesson Quiz
Find the perimeter.
1. square
   
   4.5 ft

2. rectangle
   
   2\frac{1}{2} \text{ cm}
   
   6 \text{ cm}
Problem of the Day
How many triangles of all sizes are in this diagram?

Quick Review
Evaluate.
1. $5^2$
2. $1^{10}$
3. $7^3$
4. $10^4$

Lesson Quiz
1. How many small squares will be in the tenth diagram?

2. How many squares of all sizes are in this diagram?
Problem of the Day
A rectangle has an area of 96 square centimeters and a perimeter of 40 centimeters. What are its dimensions?

Quick Review
1. ____ cm = 2 m
2. ____ mm = 28 cm
3. ____ cm = 1.5 m
4. ____ mm = 265 cm
5. ____ m = 365 cm
6. ____ km = 4.5 m

Lesson Quiz
Find the areas. Give answers in square units.

1. 
   \[ \text{3.5 ft} \times \text{5.5 ft} \]
2. 
   \[ \text{3 m} \times \text{5.4 m} \]
Problem of the Day
Start with \(\frac{1}{2}\). Subtract \(\frac{1}{2}\). Add \(\frac{1}{2}\). Subtract \(\frac{1}{2}\), and so on.
What is the result if the number of terms is even? if the number of terms is odd?

Quick Review
Find the mean and mode for each.
1. 1, 8, 8, 6, 7, 7, 8
2. 8, 5, 4, 5, 3, 2
3. 6, 2, 1, 0, 6, 1, 1
4. 5, 7, 5, 7, 5, 7, 5
5. 5, 8, 6, 8, 7, 5, 8
6. 9, 4, 3, 9, 4, 2, 9

Lesson Quiz
Find the area of each triangle.
1. \(\frac{1}{2} \times 3.6 \times 4.5 = 8.1\) square in.
2. \(\frac{1}{2} \times 7 \times 9.8 = 34.3\) square m
Problem of the Day
Pat says that there is a square whose perimeter is 60 feet, and whose area is 81 ft². Is Pat right? Why or why not?

Quick Review
Find the perimeter and the area of each figure.
1. rectangle: length 5.5 cm, width 10 cm
2. parallelogram: base 10 feet, height 8 feet

Lesson Quiz
1. Estimate the perimeter and the area. Each square represents 1 cm².
2. Find the perimeter and the area.
Problem of the Day
The radius of circle A is the diameter of circle B. The radius of circle B is the diameter of circle C. The diameter of circle A is 12 meters. What is the radius of circle C?

Quick Review
1. \( \frac{22}{7} \times 7 \)
2. \( 3.14 \times 8 \)
3. \( \frac{22}{7} \times \frac{3}{11} \)
4. \( \frac{22}{7} \times 2\frac{1}{2} \)
5. \( \frac{22}{7} \times 10 \)
6. \( 3.14 \times 10 \)

Lesson Quiz
Find the circumference of each circle. Round your answer to the nearest whole unit.

1. \( \text{diameter 15 cm} \)
2. \( \text{radius 18 yd} \)
3. \( \text{diameter 15 cm} \)
4. \( \text{radius 18 yd} \)
Problem of the Day
When folded, the figure shown makes a cube.
If 3 is on the front face, which number is on the bottom?

Quick Review
Find the perimeter or area.
1. area of a rectangle: length 8.5 ft and width 2.5 ft
2. area of a triangle with base 5.2 yd and height 10 yd

Lesson Quiz
Name each solid figure. Then write the number of faces, edges, and vertices.
1. 
2. 
Problem of the Day
How can you draw 3 congruent triangles using 6 line segments?

Quick Review
Compare. Write <, >, or = for each □.

1. \(\frac{6}{8} \text{ □ } \frac{24}{32}\)
2. \(\frac{5}{7} \text{ □ } \frac{4}{7}\)
3. \(\frac{6}{7} \text{ □ } \frac{7}{6}\)
4. \(\frac{16}{40} \text{ □ } \frac{2}{5}\)

Lesson Quiz
1. Draw two-dimensional front, side, and top views for this three-dimensional figure.

2. Given these views, draw the figure on triangular dot paper.
Problem of the Day
What is the greatest number of regions you can make by using three chords in a circle?

Quick Review
Estimate.
1. $3\frac{1}{5} + 3\frac{1}{4}$
2. $3\frac{7}{8} + 3\frac{1}{8}$
3. $3\frac{7}{8} + 3\frac{6}{7}$
4. $3\frac{1}{4} - 3\frac{1}{5}$
5. $3\frac{7}{8} - 3\frac{1}{9}$
6. $3\frac{7}{8} - 3$

Lesson Quiz
1. Predict what shape this net will make.
2. Make two different nets for a rectangular prism.
Problem of the Day
Each of the small circles in the diagram below has a circumference of $4\pi$. What is the circumference of the large circle?

Quick Review
Solve.
1. $2(3 + 7)$
2. $5(7 - 4) + 8(2 - 1)$
3. $(5 + 4)(4 + 5)$
4. $2(6 + 5 + 7)$
5. $5(8 + 2) + 3(8 - 2)$

Lesson Quiz
1. Find the surface area of this rectangular prism.
2. What is the surface area of a cube if the length of one edge is 10 in.?
Problem of the Day
How many different line segments are determined by 3 points on a line? by 4 points? by 5 points? by 6 points?

Quick Review
Estimate to determine if each answer is reasonable.
1. $85 \times 2,329 = 19,000$
2. $48 \times 659 = 19,000$
3. $59 \times 1,746 = 103,000$
4. $94 \times 422 = 42,000$

Lesson Quiz
A $4 \times 5 \times 6$ rectangular prism is made of red, blue, and white blocks. The number of red blocks equals the number of blue blocks. The number of white blocks is twice the number of blue blocks. How many blocks are white?
Problem of the Day
Toby has a rectangular garden with an area of 200 ft². What will be the area of the garden if the length is doubled and the width is doubled?

Quick Review
Write prime or composite for each number.
1. 12
2. 63
3. 17
4. 39
5. 26
6. 59
7. 6
8. 29

Lesson Quiz
Determine the volume of each solid figure.
1. 
   \[
   \begin{array}{c}
   3.5 \text{ cm} \\
   2.5 \text{ cm} \\
   3 \text{ cm}
   \end{array}
   \]

2. A cube is 12 m on one edge. What is its volume?
Problem of the Day
What is the cost of the design below if ▲ = $0.05, ● = $1.10, and ★ = $0.25?
▲ ● ★ ▲ ▲ ★ ▲ ★ ▲ ★ ★ ● ▲

Quick Review
1. \((6 \times 10^3) + (4 \times 10^2)\)
2. \((5 \times 10^4) + (3 \times 10^3)\)
3. \((4 \times 10^4) + (9 \times 10^2)\)
4. \((7 \times 10^5) + (8 \times 10^1)\)

Lesson Quiz
1. A planter 18 in. long, 6 in. wide, and 6 in. tall has wooden sides and a metal bottom. What is the area of the outside of the wooden portion?
2. A packing carton is 24 in. on each edge. Is it possible to fill it completely with no overflow with cubical boxes 6 in. on an edge? Explain.
Problem of the Day
Find the next three numbers in the sequence.
(Hint: Simplify each number.)
\[
\frac{2}{16}, \frac{4}{16}, \frac{3}{8}, \frac{1}{2}, \ldots
\]

Quick Review
Write in simplest form.

1. \(\frac{2}{6}\)
2. \(\frac{4}{8}\)
3. \(\frac{3}{12}\)
4. \(\frac{3}{6}\)
5. \(\frac{4}{12}\)
6. \(\frac{4}{10}\)
7. \(\frac{2}{8}\)
8. \(\frac{8}{10}\)
9. \(\frac{3}{6}\)

Lesson Quiz
Write each ratio three different ways.

1. 2 buttons to 1 cuff ___
2. 2 pints green to 3 pints blue ___
3. 3 onions to 5 potatoes ___
**Problem of the Day**
Kyle had a piece of rope that was $7\frac{1}{2}$ inches long. He has $1\frac{1}{3}$ inches of rope left after cutting off two equal lengths. How many inches long is each of the equal length pieces of rope?

**Quick Review**
Find the greatest common factor (GCF) for each pair of numbers.
1. 12 and 20
2. 30 and 40
3. 12 and 25
4. 16 and 40
5. 28 and 42
6. 24 and 42

**Lesson Quiz**
Write each ratio as a fraction in simplest form.
1. $9 : 72$
2. $20 : 30$
3. $\frac{18}{20}$
4. $\frac{25}{60}$
5. 12 to 27
6. 13 to 39
Problem of the Day
Write two fractions whose numerators are 1 and whose sum is $\frac{1}{2}$.

Quick Review
Find the value of $x$.

1. $\frac{2}{5} = \frac{x}{40}$
2. $\frac{1}{6} = \frac{5}{x}$
3. $\frac{x}{20} = \frac{12}{40}$
4. $\frac{3}{x} = \frac{18}{30}$
5. $\frac{24}{8} = \frac{x}{1}$
6. $\frac{9}{10} = \frac{45}{x}$
7. $\frac{25}{5} = \frac{x}{1}$
8. $\frac{5}{8} = \frac{50}{x}$
9. $\frac{7}{x} = \frac{42}{48}$

Lesson Quiz
Find the unit rate.

1. 60 cars : 5 min = $\square$ cars : 1 min
2. 750 mi : 2 h = $\square$ mi : 1 h
3. $8.32 : 16$ oz = $\$ \square : 1$ oz
Problem of the Day
Emilio is comparing prices of pencils. One package of 8 pencils costs $0.56. Another package of 6 pencils costs $0.48. Which package is the better buy?

Quick Review
Complete.
1. $5 \text{ ft} = \text{____ in.}$
2. $4 \text{ lb} = \text{____ oz}$
3. $30 \text{ cm} = \text{____ dm}$
4. $5 \text{ kg} = \text{____ g}$
5. $\text{____ ft} = 9 \text{ yd}$

Lesson Quiz
Solve each proportion.
1. \[ \frac{2}{9} = \frac{18}{n} \]
2. \[ \frac{64}{100} = \frac{a}{25} \]
3. \[ \frac{1}{5} = \frac{k}{30} \]
Problem of the Day
Luther spent $3.25 on soft drinks. He spent three times this amount on snacks. He spent double the cost of drinks and snacks on a gift for his father. Did Luther spend less or more than $40.00 on his father’s party?

Quick Review
Write an expression describing each situation.
1. 20 divided by \( y \)
2. The product of 5 and 3
3. 15 more than \( k \)
4. 4 times 3 times \( j \)
5. 12 less than 36

Lesson Quiz
Use the scale 1 in. : 3 ft to find \( r \).
1. 4 in. in the drawing represents \( r \) ft.
2. 12 in. in the drawing represents \( r \) ft.
3. \( r \) in. in the drawing represents 90 ft.
4. \( r \) in. in the drawing represents 150 ft.
Problem of the Day
The ratio of girls to boys in a choir is 5 to 2. If there are 10 boys in the choir, how many students are there in the choir?

Quick Review
Write each ratio in simplest form.
1. 12 to 20
2. \( \frac{50}{60} \)
3. 24 : 4
4. 4 to 16
5. 50 : 50
6. 90 to 30
7. \( \frac{20}{5} \)
8. \( \frac{21}{7} \)

Lesson Quiz
Tell whether you should estimate or find an exact answer.
For Friday’s banana split party, which is the better buy? Green Grocer’s $1.56 for 4 pounds of bananas, or Big Buy’s $3.19 for 8 pounds of bananas?
Problem of the Day
On a scale drawing of a soccer field, the scale is 1 cm = 10 m. What are the actual dimensions of the soccer field if the length of the scale drawing is 12 cm long and the width is three-fourths of the length?

Quick Review
Use mental math to compute.
1. $10 \times 10$
2. $25 \times 4$
3. $75 + 25$
4. $2 \times 50$
5. $100 \div 5$
6. $100 \div 25$
7. $69 + 31$
8. $199 - 98$

Lesson Quiz
Write each ratio as a percent.
1. $\frac{45}{100}$
2. $\frac{92}{100}$
3. $\frac{15}{100}$
4. $\frac{30}{100}$
5. 2 out of 100
6. 54 out of 100
7. 100 out of 100
Problem of the Day
A pitcher of water is half full. Kareem adds 3 cups of water to make it \( \frac{3}{4} \) full. How many cups of water can the pitcher hold?

Quick Review
Write a ratio for each.
1. dollars to cents
2. miles to feet
3. centimeters to millimeters
4. inches to feet
5. grams to kilograms
6. ounces to pounds

Lesson Quiz
Solve each equation for \( n \).
1. \( \frac{30}{100} = \frac{1}{n} \)
2. \( \frac{80}{100} = \frac{16}{n} \)
3. \( 70\% = \frac{35}{n} \)
4. \( n\% = \frac{13}{50} \)
5. \( 12\% = \frac{n}{25} \)
6. \( 0.42 = n\% \)
Problem of the Day
At 7:00 a.m., the bag of puffed cereal is 50% full. At 10:00 a.m., five cups of cereal are eaten and now the bag is \( \frac{1}{4} \) full. How many cups of cereal does the bag hold?

Quick Review
Write each in word form.
1. 27.04
2. \( \frac{32}{100} \)
3. \( 3 \frac{2}{10} \)
4. 207.4

Lesson Quiz
Order each set from least to greatest.
1. \( \frac{12}{25}, 0.6, 25\% \)
2. \( \frac{5}{10}, \frac{18}{20}, 45\% \)
3. 19\%, \( \frac{20}{100}, \frac{13}{50} \)
4. \( \frac{75}{100}, \frac{2}{3}, 64\% \)
Problem of the Day
I am a fraction with the digits 1, 2, and 4.
I am less than \(\frac{1}{4}\). Which fractions could I be?

Quick Review
Add mentally.
1. \(\frac{8}{10} + \frac{4}{10}\)
2. 11.2 + 2.3
3. \(\frac{1}{5} + \frac{3}{5}\)
4. 2.6 + 8.2
5. \(\frac{1}{2} + \frac{3}{4}\)

Lesson Quiz
Find 10% of each number.
1. 60
2. 39
3. 213
4. 45.7
5. 5
6. 8,348
Problem of the Day
On a social studies test, Jordan answered 75% of the questions correctly. Lucas answered $\frac{1}{5}$ of the questions incorrectly. Katy answered $\frac{7}{10}$ of the questions correctly. Who answered the most questions correctly?

Quick Review
Compute mentally.
1. $645 \times 100$
2. $216 \times 100$
3. $3400 \div 10$
4. $53200 \div 100$
5. $(250 \div 10) \times 10$

Lesson Quiz
Solve. Use any method.
1. 25% of 424
2. 8% of 40
3. 70% of 200
4. 45% of 10
5. 49% of 600
Problem of the Day
Al made 11 out of 25 free throws, Jeff made 13 of 20, and Yoshi made 12 of 18. What percent of the total shots did each make?

Quick Review
Substitute and compare to $\frac{1}{2}$. Write < or >.

1. $\frac{7}{16}$
2. 58%
3. 0.13
4. 60%
5. 18%
6. 0.400

Lesson Quiz
Make a circle graph to display the data in the table as percents.

<table>
<thead>
<tr>
<th>Graduation Celebration Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catering</td>
</tr>
<tr>
<td>Gifts</td>
</tr>
<tr>
<td>Flowers</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
</tbody>
</table>
Problem of the Day
Greg rolled two number cubes, each numbered 1 to 6. How many possible sums could he roll?

Quick Review
Write each product.
1. $2 \times 5$
2. $7 \times 2$
3. $6 \times 4$
4. $9 \times 3$
5. $3 \times 3$
6. $4 \times 3$
7. $8 \times 6$
8. $8 \times 8$

Lesson Quiz
You have one choice from each category. Multiply to find the number of choices possible.
1. 6 bikes, 4 sizes
2. 3 doors, 7 door handles
3. 4 types of yogurt, 3 types of fruit
Problem of the Day
Jerry bought a red ball, a yellow ball, and a green ball. The red ball was most expensive. The mean price of the balls was $3. The range of prices was $4. The yellow ball cost $1. What were the prices of the green ball and the red ball?

Quick Review
Write <, >, or = in each  .
1. 0.4  0.1
2. 0.5  0.45
3. 0.8  0.82
4. 0.01  0.10

Lesson Quiz
You spin once on the spinners below. Tell which event is more likely. If necessary, describe an event as impossible or certain.
1. If the spinner is split in half, \( \frac{1}{2} \) red and \( \frac{1}{2} \) blue
2. If the sections of the spinner have an even number written in them.
Problem of the Day
The perimeter of the rectangular swimming pool is 50 meters. One of the sides is 10 meters long. What area would a pool cover be if it exactly covered the water’s surface?

Quick Review
Simplify.
1. \( \frac{4}{8} \)
2. \( \frac{10}{30} \)
3. \( \frac{4}{10} \)
4. \( \frac{14}{28} \)
5. \( \frac{3}{21} \)
6. \( \frac{4}{20} \)

Lesson Quiz
Suppose you toss a number cube that has sides labeled 1, 1, 2, 3, 4, and 5. Find the probability of each event.
1. The number 6
2. The number 1
3. A number greater than 2
4. A number divisible by 5
Problem of the Day
The theoretical probability of choosing a blue marble from a bag of marbles is \( \frac{1}{3} \). There are 18 marbles in the bag. How many marbles are blue?

Quick Review
Add and then simplify.

1. \( \frac{3}{8} + \frac{4}{8} \)
2. \( \frac{2}{6} + \frac{3}{6} \)
3. \( \frac{4}{9} + \frac{4}{9} \)
4. \( \frac{1}{8} + \frac{5}{8} \)
5. \( \frac{2}{7} + \frac{3}{7} \)
6. \( \frac{2}{10} + \frac{7}{10} \)

Lesson Quiz
Make an organized list to solve the problem.
Two of the following nominees will be elected for the school leadership council: Karen, Sandy, Troy, Ravi, and Erin. How many possible combinations with two students are there?
Problem of the Day
The range of a set of three numbers is 9. The median is 12. One of the numbers is 6. What is the other number?

Quick Review
Write each difference.
1. 18 – 7
2. 28 – 19
3. 41 – 27
4. 34 – 16
5. 25 – 17
6. 38 – 31
7. 57 – 32
8. 93 – 48

Lesson Quiz
Record the probability as a fraction in simplest form.
1. Suppose you toss a number cube that is labeled 1–6 a total of 60 times. What is the theoretical probability of tossing a 6?
2. If a number cube labeled 1–6 is tossed 60 times and 15 times it lands on 6, what is the experimental probability of tossing a 6?
Problem of the Day
Look at the cards shown. What is the probability of drawing a card where the letter is the first letter of a month of a year?

Quick Review
Find the product, then simplify.

1. \( \frac{3}{4} \times \frac{1}{3} \)
2. \( \frac{4}{5} \times \frac{2}{10} \)
3. \( \frac{4}{6} \times \frac{1}{2} \)
4. \( \frac{2}{3} \times \frac{5}{6} \)
5. \( \frac{3}{9} \times \frac{5}{6} \)
6. \( \frac{4}{8} \times \frac{1}{3} \)

Lesson Quiz
Find the probability of compound events.
You have a spinner that is equally divided into four sections: red, green, blue, and yellow. You have a number cube labeled 1–6. What is the probability of spinning a green and tossing a 5?
Problem of the Day
There are 180 students at the spring fair. The ratio of girls to boys is 5 to 4. How many boys are at the spring fair?

Quick Review
A number cube is labeled 2, 2, 3, 3, 4, and 6. Describe each event as equally likely, likely, unlikely, certain, or impossible.
1. rolling a 2 or a 3
2. rolling a 7
3. rolling a 2 or a 4
4. rolling a one-digit number

Lesson Quiz
Use the table to solve the problem.
At the state fair, 160 people redeemed their entry tickets and 40 people won cowboy hats. If 20,000 people redeemed their tickets, how many could expect to win a cowboy hat?
Problem of the Day
Out of 40 marbles, if 10 are red and the rest are white, what is the probability of choosing a red marble? Express the probability as a fraction. If only 5 marbles were red and the rest were white, what would the probability be of picking a red marble? Express the probability as a fraction.

Quick Review
Name the product or quotient.
1. $14 \times 5$
2. $8 \times 90$
3. $100 \div 20$
4. $121 \div 11$

Lesson Quiz
Name the value of $x$ in each of the following pairs of equations.
1. $x + 4 = 8, x + 6 = 10$
2. $x + 2 = 6, x + 1 = 5$
3. $3x = 12, 5x = 20$
Problem of the Day
Miko earns a weekly salary of $256. She spends $64 of it on food. What percent of her salary is used for food?

Quick Check
Find the product or quotient.
1. $\frac{1}{3} \times \frac{3}{4}$
2. $\frac{2}{5} \times \frac{5}{18}$
3. $\frac{5}{8} \times \frac{4}{15}$
4. $\frac{18}{21} \div \frac{6}{7}$

Lesson Quiz
Tell the inverse operation you would use to solve the equation. Then solve.
1. $x + 12 = 78$
2. $y - 11 = 13$
3. $16m = 48$
4. $84 = 7a$
Problem of the Day
At Jackson Elementary School there are 431 boys. There are 59 more girls than boys at the school. How many students are there in all?

Quick Review
Find the sum or difference.
1. $157 + 123$
2. $486 + 298$
3. $3,647 - 1,674$
4. $5,343 - 1,761$

Lesson Quiz
Write an equation to solve each problem.
1. Belle paid her brother Bo $112 for working in her gift shop for 16 hours. What was Bo’s hourly wage?
2. Inez earns $78 more per week than Paco. Paco’s weekly salary is $665. What is Inez’s weekly salary?
Problem of the Day
Conrad made 30 sandwiches. He made half as many sandwiches with turkey as with ham. The rest were peanut butter sandwiches. If he made 5 turkey sandwiches, how many ham sandwiches and peanut butter sandwiches did he make?

Quick Review
Find the value of \( y \) when \( x = 8 \).
1. \( 15 + x = y \)
2. \( 65 - x = y \)
3. \( x + 28 = y \)
4. \( y = 47 + x \)
5. \( 78 - x = y \)

Lesson Quiz
Copy and complete each function table.

1. \( y = x - 1 \)
   
<table>
<thead>
<tr>
<th></th>
<th>( x )</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( y )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. \( y = 3x \)
   
<table>
<thead>
<tr>
<th></th>
<th>( x )</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( y )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Problem of the Day
Ning used $40 to buy 3 CDs. He received $2.50 in change. What was the cost of each CD if each cost the same amount?

Quick Review
Give the inverse operation, then solve.
1. \( x + 18 = 30 \)
2. \( y - 5 = 32 \)
3. \( 14m = 70 \)
4. \( 128 = 16a \)

Lesson Quiz
Bela began a new job and has $10 per week taken out of her salary to put in an IRA account. The company put $100 into her account as an encouragement to save.
1. Write a function rule that shows the relationship between number of weeks and total amount saved.
Problem of the Day
The Handy Hardware Store is open Monday through Saturday from 9:30 a.m. to 6:00 p.m. How many hours is it open per week?

Quick Review
Round the number 483,709,681 to the place indicated.
1. ten thousands
2. hundred thousands
3. millions
4. ten millions
5. hundred millions

Lesson Quiz
Write the opposite of each integer.
1. +8
2. -5
3. +27
4. -14
5. +32
Problem of the Day
How many different numbers with digits to the hundredths place are greater than 2 and less than 3?

Quick Check
Find each difference.
1. $174 - 43$
2. $462 - 341$
3. $1,503 - 402$
4. $2,375 - 1,254$
5. $1,434 - 131$

Lesson Quiz
Write the integers in order from least to greatest. Draw a number line if you wish.
1. $0, -3, -1, +4$
2. $+3, -3, +5, -5$
3. $-6, -8, -10, -5$
4. $+6, -7, -4, +5$
5. $+8, -11, +1, -9$
Problem of the Day
The sum of the digits of a three-digit number is 20. The ones digit is twice the hundreds digit. What is the number?

Quick Review
Add 101 to each number.
1. 368
2. 469
3. 592
4. 638
5. 319
6. 4,789
7. 2,805
8. 1,638
9. 3,909
10. 5,790

Lesson Quiz
Use two-color counters to find each sum.
1. $^+4 + ^-2$
2. $^+6 + ^-1$
3. $^+3 + ^-7$
4. $^-6 + ^+8$
5. $^-6 + ^+6$
Problem of the Day
Megan walked home from school in 20 minutes, took 5 minutes to change clothes, did homework for 35 minutes, and practiced the piano for 45 minutes. If she finished practicing at 5:30 p.m., at what time did she leave school?

Quick Review
Find each sum or product.
1. 300 + 5,000 + 80
2. 300 \times 5,000 \times 0
3. 800 \times 10 \times 100
4. 400 + 30 + 3,000
5. 4,000 + 30,000 + 10

Lesson Quiz
Use two-color counters to find each difference.
1. +2 – −4
2. +6 – +2
3. −7 – −7
4. +7 – −9
5. +9 – +9
6. −11 – −3
Problem of the Day
Every fifth customer at Biff’s Bargain Barn wins a prize. How many prizes are awarded if there are 188 customers?

Quick Review
Find the sum or difference.
1. \(+12 + (-18)\)
2. \(+7 - (-3)\)
3. \(-7 + (-2)\)
4. \(-5 - (-8)\)

Lesson Quiz
Decide whether the answer will be positive or negative. Then use a number line to add or subtract.
1. At noon one February day, the temperature was \(+18^\circ F\). From 6:00 A.M. to noon, the temperature rose by \(22^\circ F\). What was the temperature at 6:00 A.M.?
2. In the first two rounds of a game, Ali’s scores were \(-3\) and \(-4\). Mala’s scores were \(-4\) and \(-4\). Who had the greater total score? Why?
Problem of the Day
In the equation $60 \div 6 \times 2 + 3 = n$, where should parentheses be placed so that $n = 4$?

Quick Review
Write the missing number.
1. $8 \text{ m} = \underline{\phantom{00}} \text{ cm}$
2. $2,000 \text{ mL} = \underline{\phantom{00}} \text{ L}$
3. $250 \text{ mm} = \underline{\phantom{00}} \text{ cm}$
4. $30 \text{ m} = \underline{\phantom{00}} \text{ dm}$

Lesson Quiz
Solve. Use a number line to help you.
1. At 6:00 A.M., the temperature was $-3\text{°F}$. By 3:00 P.M. the temperature was $+10\text{°F}$. What was the change in temperature during those 9 hours?
2. At 7:00 A.M., the temperature was $-10\text{°F}$. By noon, it had risen 15°. By 8:00 P.M. the temperature had dropped 8°. What was the temperature at 8:00 P.M.?
Problem of the Day
Franco, Will, and Tim each engage in a different sport. The sports are football, track, and wrestling. The name of the sport and the name of the boy do not begin with the same letter. Franco does not wrestle. Which is each boy’s sport?

Quick Review
Write the opposite and the absolute value of each integer.
1. $+11$
2. $+8$
3. $-7$
4. $-5$
5. $-14$

Lesson Quiz
In which quadrant would the coordinate pair $(+8, +10)$ appear? (B)
A. Quadrant I
B. Quadrant II
C. Quadrant III
D. Quadrant IV
Problem of the Day
What temperature is 12 degrees higher than $-5^\circ F$?
What temperature is 9 degrees lower than $3^\circ F$?

Quick Review
Find each sum.
1. $+5 + -4$
2. $-9 + -2$
3. $+3 + -1$
4. $-11 + +5$
5. $-7 + -2$

Lesson Quiz
Complete the function table for $y = 2x - 1$.

<table>
<thead>
<tr>
<th>$x$</th>
<th>$y$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$+3$</td>
<td>$+5$</td>
</tr>
</tbody>
</table>

1. 
2. 
3. 
4. 
5.
Problem of the Day
The perimeter of Kristen’s garden is 30 feet. The area is 50 square feet. What are the length and width of the garden?

Quick Review
Identify the quadrant in which each point is located.
1. (+1, +4)
2. (+3, −3)
3. (−6, +8)
4. (−3, −2)

Lesson Quiz
Find one ordered pair for each function.
1. \(y = x + 2\)
2. \(y = x - 4\)
3. \(y = 2x\)
4. \(y = 3x\)
5. \(y = 2x + 3\)
Problem of the Day
The letters $A$, $B$, $C$, and $D$ are arranged in a row. $B$ is in front of $A$ but behind $C$. $D$ is behind $A$. Which letter is second?

Quick Review
Given the function $y = 5x - 10$, find $y$ for each value of $x$.

1. $x = +2$
2. $x = 0$
3. $x = +5$
4. $x = -1$
5. $x = +1$

Lesson Quiz
Solve.
The temperature of the water in the pond in Green Park rose to $65^\circ F$ at 3:00 p.m. The temperature dropped 3 degrees every hour after that. What will the temperature of the water be by 8:00 p.m.? What equation can you write?
Problem of the Day
Draw a circle and a square. How many points and lines of symmetry does each figure have?

Quick Review
Write the reciprocal of each fraction.
1. $\frac{3}{4}$
2. $\frac{8}{5}$
3. $\frac{1}{a}$
4. $\frac{x}{y}$

Lesson Quiz
Name the coordinates of the point $(+2, +2)$ after each transformation. Use a coordinate graph to help you.
1. A translation 5 units right
2. A translation 6 units left and 1 unit down
3. A reflection across the $y$-axis.
4. A reflection across the $x$-axis