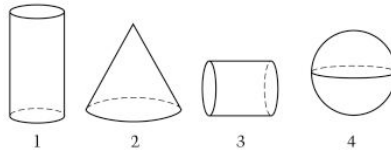


Show your work and/or explain your thinking for each problem.

Set 1

1. Which of the following shapes are cylinders?



2. Macy buys a bag of marbles. There are 25 red, 65 blue, 10 black, and 50 green. Macy reaches in and grabs one marble. Which color marble did she most likely grab?
3. The product of two whole numbers is 8. What is their sum?
4. Write an addition and a multiplication sentence for the array shown below.



5. Brook and Hailey are planting flowers in their backyard. Brook plants 4 rows of tulips with 5 tulips in each row. Hailey plants 4 rows of daisies with 6 daisies in each row. Draw an array to show how Brook and Hailey placed their flowers.
6. Marty has a bag with 158 marbles in it. Meg has a bag with 244 marbles. How many marbles do they have altogether?
7. Mr. Strong has 76 students in his music class. Miss Mack has 121 students in her class. How many more students does Miss Mack have than Mr. Strong?
8. Jamie is filling bags of candy for a party. She has 12 bags and wants to put 3 pieces of candy in each bag. How many pieces of candy does she need?
9. Every fourth grader in Mill Elementary School has five textbooks. There are 128 fourth graders at Mill Elementary School. Write a number sentence that could be used to determine the number of books the fourth graders have. Explain your thinking.
10. Jorge is planting a flower garden. The array below shows the number of plants he is putting in his garden. Write and solve a multiplication sentence that shows how many flowers Jorge is planting in his garden.



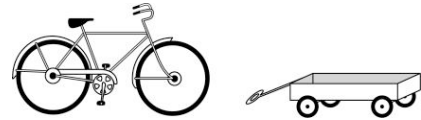
Show your work and/or explain your thinking for each problem.



Set 2

1. A regular box of crayons holds 24 crayons. There are 8 boxes of crayons in a carton. How many crayons are there in the carton?

2. A store has bicycles and wagons for sale like the ones shown below. There are 18 wheels in all. How many bicycles and wagons are there? List all possible combinations.



3. A mail carrier dropped her mail bag and the letters are all mixed up. Put the addresses that are odd in order from least to greatest. Then put the addresses that are even in order from least to greatest.

- 2553 Bahama Rd.
- 2468 Bahama Rd.
- 2050 Bahama Rd.
- 2532 Bahama Rd.
- 2125 Bahama Rd.
- 2903 Bahama Rd.
- 2022 Bahama Rd.
- 2069 Bahama Rd.
- 2206 Bahama Rd.
- 2097 Bahama Rd.
- 2342 Bahama Rd.
- 2551 Bahama Rd.

4. Two whole numbers greater than 2 are multiplied together. The product is 36. What could the two numbers be? List at least two possibilities.

5. What number is two hundred less than one thousand five?

6. What time is it 30 minutes after 2:45?

7. What is the smallest whole number that is divisible by both 6 and 9?

8. Mr. Evans and Mr. Morgan raise rabbits. According to the graph shown below how many rabbits did they raise last year altogether?



Key = 50 rabbits

9. Adult male polar bears weight two to three times as much as a female polar bear. Female polar bears weigh between 300 and 500 pounds. How much do male polar bears weigh?

10. Write and solve a multiplication sentence that matches the array shown below.



Show your work and/or explain your thinking for each problem.




Show your work and/or explain your thinking for each problem.

Set 3

1. Rashad wants to buy 4 notebooks that cost \$2.75 each including tax. Rashad only has dollar bills and no coins. How many dollar bills will he need to buy the three notebooks?
2. A male bobcat is 1,230 millimeters in length. A deer mouse is 249 millimeters long. How much longer is the male bobcat than the deer mouse?
3. A bag of 6 muffins costs \$3.00. Louis has \$18.00. How many bags of muffins can he buy?
4. Mr. Garcia's fourth grade class voted for their favorite book from their summer reading list. The three books they read were:  
*Tales of a Fourth-Grade Nothing*      *Julie of the Wolves*      *The Boy Who Saved Baseball*  
Here are some clues to the results of their vote.  
38 students voted  
The winner got the most votes, just over half  
There was a two-way tie for second place.

Create a graph or chart that shows the results of the vote and matches all three clues.

5. Coral plants 6 rows of strawberry plants in her grandmother's garden. The first three rows are show below. Key  = 1 strawberry plant



If the pattern continues, how many strawberry plants will there be in the 6<sup>th</sup> row?

6. Two whole numbers have a sum of 15 and a product of 56. What are the two numbers?
7. Michael's friend has a collection of 82 baseball cards. His father has 10 times as many. How many baseball cards does Michael's father have?
8. Emma's friend has 126 comic books. Her sister has 8 times as many. How many comic books does Emma's sister have?
9. Corey arranged 24 blocks into a rectangular shape. Sketch and describe all the rectangles Corey could have made using 24 blocks.
10. A boy has 20 gumballs. There are three times as many blue gumballs as red ones. How many red gumballs are there? What fraction of the gumballs are blue?

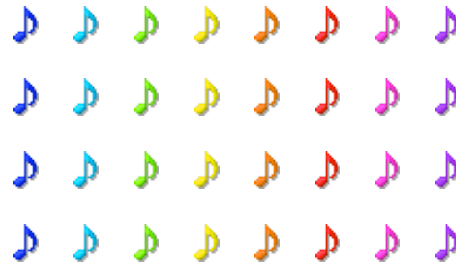
Show your work and/or explain your thinking for each problem.

**Set 4**

- What is the smallest whole number divisible by both 8 and 6?
- The table below shows the number of players for **each** team for different sports. Fill in the table to show the total number of players that are needed for each game.

Sport	Baseball	Soccer	Basketball	Football	Hockey
Number of players for each team	9	11	5	11	6
Number of players in a game					

- Write the addition and multiplication sentences that describe the array shown below. Then solve.



- In the number sentence below find the missing number that belongs in the box.

$$\begin{array}{r} \square 23 \\ \times 5 \\ \hline 1615 \end{array}$$

- There are 52 students going to the museum. Each car can hold four students. How many cars will be needed to get the students to the museum?
- Regina is putting her books on a bookshelf. She has 45 books and wants to put 9 books on each shelf. How many shelves does she need to hold all of her books?
- The city bus stops at your corner at the following times. What are the next two times the bus will stop at the corner?  
**9:12 a.m.    9:25 a.m.    9:38 a.m.**
- Mrs. Alden's class sits in 4 equal rows in the gym. She has 32 students in her class. How many students are there in each row?
- The Cooking Club has opened 11 small boxes of raisins. The number of raisins in each box is listed below. Predict how many raisins will be in the next box. Explain your thinking.

**33    35    41    38    37    31    29    38    40    36    34**

- Miguel has \$13.00 for dinner. He spends \$8.00 on a pizza and \$1.50 on a drink. How much money does he have left?

Show your work and/or explain your thinking for each problem.

Set 5

1. What is the answer when you subtract 28 ones from 28 tens?
2. Mount Everest is the world's tallest mountain at 29,035 feet above sea level. Mount McKinley is the tallest mountain in North America at 20,320 feet above sea level. How much taller is Mount Everest than Mount McKinley?

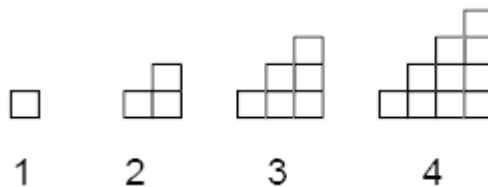
3. Look at the hexagons shown and complete the table.



Number of hexagons	Number of sides
1	6
2	12
3	
4	
5	

If the table was extended to include 45 hexagons, how many sides would you have?

4. The Pacific Ocean covers about 155,557,000 square kilometers. The Atlantic Ocean covers about 76,762,000 square kilometers. About how many times larger is the Pacific Ocean than the Atlantic?
5. The quotient of two whole numbers is 8. One of the numbers is 96. What is the other number?
6. By how much would the value of the number 26,835 change if the 2 was replaced by a 7?
7. There are 4 teams in a soccer tournament. Each team plays each of the other teams one time. What is the total number of games that will be played in the tournament?
8. Kristina is having a party for herself and 11 of her friends. Her mother baked 3 dozen cupcakes and 60 cookies for the party. How many cupcakes and how many cookies will each child get? Each child must get the same number.
9. I have 26¢ in nickels and pennies. If I double the number of nickels I have I will have 31¢. How many pennies do I have?
10. The first four arrangements in a stair step pattern are shown below. Sketch the next two arrangements in the pattern. How many squares would it take to build the 7<sup>th</sup> figure in the pattern?



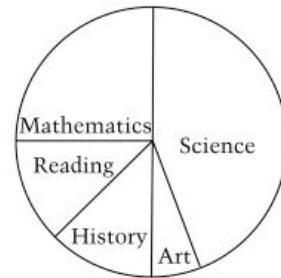
Show your work and/or explain your thinking for each problem.

Set 6

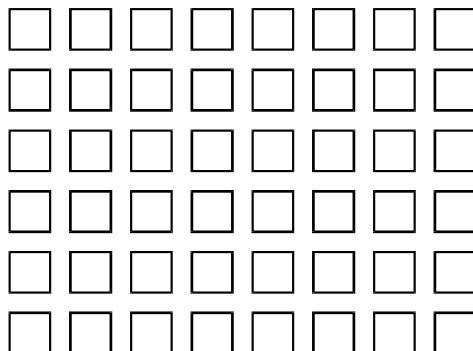
1. Carlos earns the money for doing weekly chores. The table shows how much he earns for each chore. Carlos wants to earn \$5.00. Name two combinations of chores he could do to earn \$5.00.

Take out trash	\$1.00	Dust furniture	\$1.00
Do the dishes	\$2.00	Clean the garage	\$3.00
Mow the lawn	\$3.00	Water houseplants	\$1.00
Sweep floors	\$2.00	Vacuum floor	\$2.00
Wash windows	\$3.00	Fold laundry	\$1.00

2. Name two combinations of chores he could do to earn \$10.00.
2. In the following number pattern what number comes next?  
9, 12, 10, 13, 11, 14,
3. Tom baked 102 cookies for the school bake sale. He is putting 7 cookies in each bag. How many bags of cookies will Tom get?
4. What number is 16 ones less than 16 thousands?
5. Maddy's mom buys 2 cartons of eggs every week at the store. Each carton holds 12 eggs. How many eggs has Maddy's mom bought in the last 8 weeks?
6. The pie chart shows how much time Becky spent on her homework in each subject last week. If she spent 2 hours on reading, about how much time did she spend on her homework altogether?




7. Sunni earns \$4.00 per hour doing yard work. She earned \$128.00 over the summer doing yard work. How many hours did Sunni work?
8. Luke has 48 baseball cards. He arranged all the cards in the array shown. What other arrays could Luke make using all 48 baseball cards?




Show your work and/or explain your thinking for each problem.

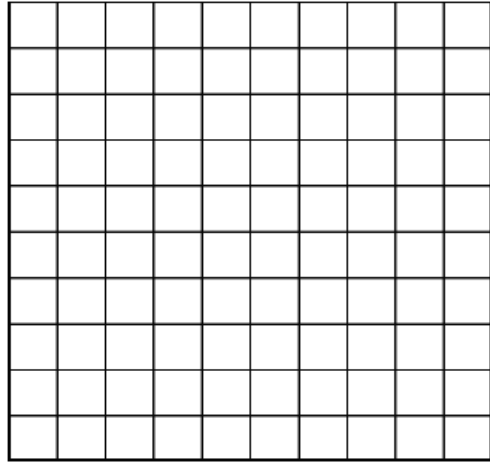
Set 6 continued

9. The park committee wants to fence in an area of a park. They have 12 sections of fence. On the grid below draw **2 different** closed shapes that use 12 sections of fence.

 is one square unit of area

 is one unit of fence

What are the areas of your closed figures?



10. The length of a dinosaur, rounded to the nearest 10 feet, was 60 feet. What are all the possible whole number values the length could have been? Explain your thinking.



Show your work and/or explain your thinking for each problem.

Set 7

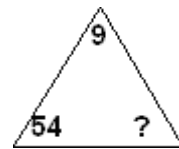
- Every year the town of Smithville has a hotdog eating contest. This year there were 4 contestants. Anthony ate 16 hotdogs, his sister Megan ate 22. Benny ate three times as many as Anthony and their friend Koji ate 46. Benny says he ate more than anyone else. How many hotdogs did Benny eat? Did he win the contest? Explain.

- Allie is saving pennies every day. On Monday she saved one penny. On Tuesday she saved two pennies, on Wednesday she saved four pennies, and on Thursday she saved eight. If this pattern continues how many pennies will she save on the 8<sup>th</sup> day?

- Mr. Morgan owns a dog grooming shop. His prices are shown at right. John has two small dogs and one large one that need grooming. How much will it cost John to have them groomed at Mr. Morgan's shop?

Small dog	\$27
Large dog	\$35
Shampoo only	\$15

- Ms. Gray's fourth-graders are learning their multiplication and division facts. They are using triangular flash cards to help them learn their facts. One of the cards is missing a numbers on one of the corners. What number is missing?



- A scientist was counting the number of fish swimming up a river. The table shows the number of fish that swam by during a four hour period. How many fish did the scientist count during the four hours altogether?

Hour 1	Hour 2	Hour 3	Hour 4
25	43	52	16

- Tickets to a movie theater cost \$6.00 for children and \$9.00 for adults. Leila bought tickets for 3 children and 5 adults. How much did Leila spend on tickets?
- Jerome baked 72 cookies for a party at school. Jerome knows he can give each of his classmates 3 cookies and still have three for himself. How many students are in Jerome's class, including Jerome?
- The drama club sold 128 tickets to their school play. They need to arrange the chairs in rows of 8. How many rows of 8 do they need?
- A group of 34 people is going on a trip on the river. Each of the boats can hold 4 people. How many boats do they need altogether?
- Look at the hexagon pattern and complete the table. Write a number sentence that would tell you how many sides there would be if you had 65 hexagons.



Number of triangles	1	2	3	4	5	6
Number of sides	6	12				

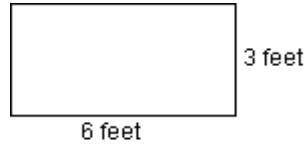
Show your work and/or explain your thinking for each problem.

Set 8

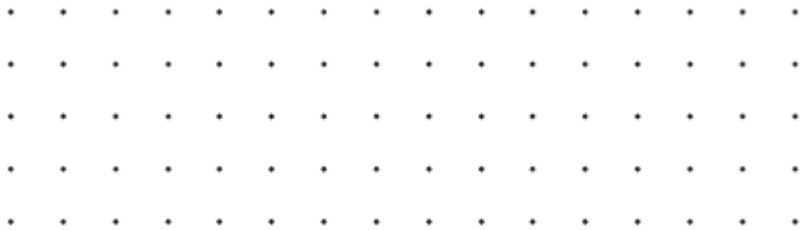
1. Use the grid to draw a polygon with an area of 15 square units. What is the perimeter of the rectangle? Explain your thinking.



2. What are the area and the perimeter of the rectangle?



3. A square has a side length of 9. What are its area and its perimeter?
4. A square has a perimeter of 32. What is its area? Explain.
5. Paul's mother had \$95.00. After she bought Paul a football she had \$83.00 left. How much was the football?
6. The product of two numbers is 108. Their difference is 3. What are the two numbers?
7. Use the grid to draw two rectangles with a perimeter of 12.

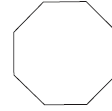


8. There are 10 members on the school track team. Each member ran 11 miles. How many miles did the members run altogether?
9. Kaley runs 2 miles each day. She runs 5 days a week. How many miles does Kaley run each month?
10. Which of the following does **not** equal 915?  
9 hundreds, 1 ten, and 5 ones  
91 tens, 5 ones  
9 hundreds, 15 tens  
90 tens, 15 ones

Show your work and/or explain your thinking for each problem.

Set 9

1. The octagon shown has a side length of 7 units. What is the perimeter?

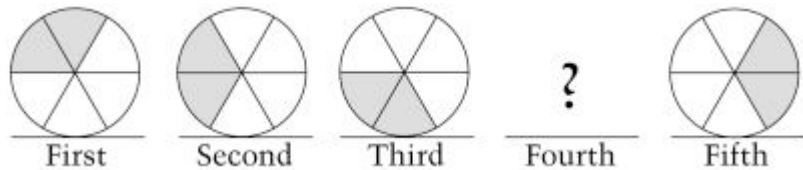


2. Here is a set of numbers. Write **at least** six true statements about the set of numbers.

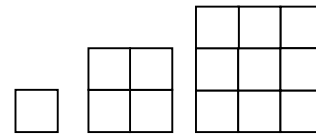
1, 5, 9, 13, 17, 21, 25, 29, 33, 37, 41, 45, 49, 53, 57, 61, 65, 69, 73, 77, 81

3. 8 students brought enough baseball cards to school to trade equally among themselves. List three different amounts they could have brought to school.

4. Sketch the fourth figure in the pattern shown?



5. Maria's recipe makes 48 muffins. Her muffin pan will bake 9 muffins at a time. How many batches must she bake to cook all 48 muffins?
6. The announcer at a hockey game says there are about 8,000 people at the game that day. If this number has been rounded to the nearest thousand, what is the maximum number of people who could have been in attendance? Explain.
7. Mikayla, Collin, and Jorge bought fruit juice bars. Mikayla bought 6 bars. Collin bought three times as many bars as Mikayla and Jorge bought half as many as Collin. How many fruit juice bars did Jorge buy?
8. How many squares will it take to make the next figure in the pattern shown below?

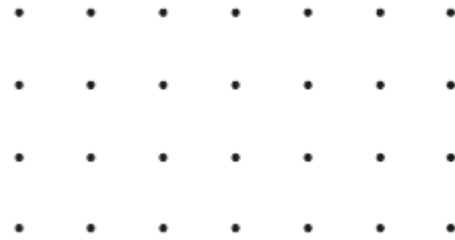


9. Ron did 15 math problems on Monday, 12 math problems on Tuesday, 8 on Wednesday, and 19 more math problems on Thursday. On Friday Ron said he had completed 71 math problems during the week. How many math problems did Ron do on Friday?
10. Alexandra cut 5 pizzas into 8 slices each and 3 pizzas into 16 slices each. How many slices of pizza were there altogether?

Show your work and/or explain your thinking for each problem.

Set 10

1. A square and a rectangle both have a perimeter of 20. What is the area of the square? Use the grid to help you draw and determine the area of the square.



2. Write two multiplication sentences that represent the number of pencils in the array shown. Are the expressions equivalent? Explain



3. Juice boxes come in packs of 8. Don buys 16 packs for his birthday party. Write and solve a number sentence that could be used to determine the total number of juice boxes Don bought.
4. Use estimation to answer the following problem. Mountain Elementary School is having an assembly. Chairs are set up in rows of 36. There is room for 18 rows. About how many chairs is this? Explain your thinking.
5. At Mountain Elementary School 78 students have signed up to play basketball. There are 5 members on each team. How many basketball teams will there be?

6. Each shape stands for a different number. All shapes that are the same stand for the same number. Find the number for the triangle.

$$\begin{aligned} \bigcirc + \nabla &= 18 \\ \bigcirc + \bigcirc &= 20 \end{aligned}$$

7. Candis is planting a rectangular garden whose dimensions are 18 feet by 9 feet. What is the area and the perimeter of her garden?
8. When numbers are put into an input-output machine the following result occurs. What was the rule for changing the numbers?

Input	Output
4	28
5	35
6	42

9. Every hour a company makes 126 plastic cups and puts them into packages of 9 each. How many packages of cups are made each hour?
10. Devon bought 24 pencils. He gave 8 to his sister and 11 more to his friend. Devon bought 15 more. How many pencils does Devon have?

Show your work and/or explain your thinking for each problem.

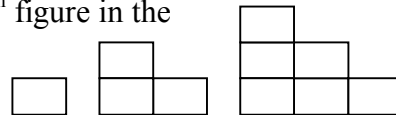
Set 11

1. Which of the following does **not** equal the value of the 9 in the number 69,321? Explain.

- 9 thousands
- $9 \times 100$
- $9000 \times 1$
- 90 hundreds

2. A square has a perimeter of 32. What is its area?
3. A rectangle has a perimeter of 36. Its length is 13. What is its width? Make a sketch to help you solve this problem. Be sure to label the dimensions.
4. In football touchdowns are worth 7 points and field goals are worth 3 points. During a game Valley Elementary School football team made 3 touchdowns and 2 field goals. Write and solve a number sentence that could be used to determine how many points Valley Elementary made during the game.

5. How many rectangles will it take to make the 6<sup>th</sup> figure in the pattern shown?



6. Daniel is driving across country in three days. He drives 423 miles the first day and 543 the second day. The trip is 960 miles altogether. How far does Daniel have to drive on the third day?
7. Vicky started with 20 counters. She subtracted 5 counters at a time until she had no counters left. Write the subtraction and related division sentences that describe Vicky's actions.
8. Complete the table.

Counters	Number of Equal Groups	Number of Counters in Each Group
12	4	?
24	?	3
45	5	?
56	?	8
28	?	7

9. Elias has 20 books that he wants to put into equal groups. List all the different ways Elias could group his books.
10. There are 60 hamburgers to feed 43 children. At most how many children can have two hamburgers?

Show your work and/or explain your thinking for each problem.

Set 12

1. Suzanne is saving part of her allowance each week. The table below shows the amount she is saving each week. How much money will she have at the end of 8 weeks?

Week 1	Week 2	Week 3	Week 4
\$6.00	\$12.00	\$18.00	\$24.00

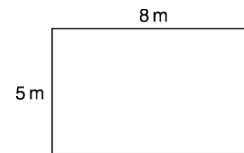
2. Gerald has 61 trading cards. He keeps 16 cards and splits the remainder with his three friends. How many trading cards does each of his friends get?

3. The table shown is part of a hundreds board. Make at least 6 observations about the numbers in the table.

21	22	23	24	25
31	32	33	34	35
41	42	43	44	45

4. Mr. Lee picked up his children from soccer practice 20 minutes before 5:00 pm. What time was it?
5. The fourth graders at Rocky Elementary School are walking to the park. They need one adult for every 8 students. There are 16 adult volunteers. How many fourth graders can go on the walk?

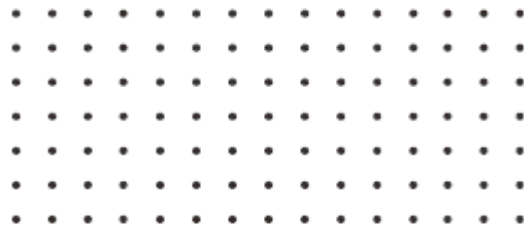
6. What are the area and the perimeter of the rectangle shown?



7. Joanne works as a babysitter for \$3.00 an hour after school and on weekends. She works for 2 hours on Monday, 2 hours on Tuesday, and 4 hours on Saturday. How much money did she earn?

8. What is the perimeter of a square with an area of 9?

9. Sketch two polygons with an area of 18 on the grid. What are their perimeters?



10. Anthony is having 10 friends over for a pool party. He is going to serve pizza. Each pizza is cut into 8 slices. What is the fewest number of pizzas Anthony needs to order so that every person at the party can have at least 4 slices of pizza?

Show your work and/or explain your thinking for each problem.

Set 13

1. There are 28 people in the art room. There are 89 people in the auditorium. How many more people are in the auditorium than the art room?
2. Sophia is taking a trip. She plans to drive 250 miles each day. Her trip is 2,561 miles long. She has already driven 975 miles. How much further must she drive?
3. A music store sells 275 music CDs each week. How many music CDs does it sell in 25 weeks?
4. Ms. Gerston bought 6 dozen eggs at \$1.12 per dozen. What was the total cost of the eggs?
5. A fish tank at Pet World had 72 fish. Mr. Garcia added 35 more fish. About how many fish were there in the tank? Explain.
6. Billy has \$0.93. He has 9 coins. He has 2 more dimes than quarters. What coins does he have?
7. Sarah buys a t-shirt. The total cost is \$14.79. She pays with a \$20 bill. Now much change should she receive?
8. Jose estimated there are about 50 pencils in a box. About how many pencils are there in 6 boxes?
9. There are 972 students at Smith Elementary School. On Wednesday, 74 students were absent. How many students were left in school?
10. A pet store has 8 dogs for sale. Each dog has 4 legs. What is the total number of legs?

Show your work and/or explain your thinking for each problem.

Set 14

1. Ms. Hernandez formed teams of 8 students each from the 34 students in her class. She formed as many teams as possible, and the students left over were substitutes. How many students were substitutes?
2. Taylor can type 15 words on her computer each minute. How many minutes will it take her to type 105 words?
3. Vicky spent \$26, not including tax, on supplies for her dog Rex. She bought 2 of one item and one other item. Using the chart, what did she buy? Explain your reasoning.

Supplies at a Pet Store	
Leash	\$8
Collar	\$5
Food bowl	\$7
Dog bed	\$14
Dog toys	\$12

4. Marla's mom told her she would put \$5 in her savings account for every \$15 that Marla saved. If her mom put \$30 in her account, how much did Marla save?
5. In the human body, each finger has 3 bones and each thumb has 2 bones. Tim has 8 fingers and 2 thumbs. How many bones does Tim have in his fingers and thumbs?
6. One hundred people are surveyed about their favorite food. Of these, 25 say their favorite food is pizza. You are drawing a circle graph to show the results of the survey. What fraction of the graph should you make the section for the pizza? Explain how you decided.
7. There were 16 people in a doctor's office. There were three times as many adults as there were children. How many adults and how many children were in the doctor's office? Explain your thinking.
8. Kathy and her uncle are building a pen for her 2 dogs. The pen is 24 feet by 18 feet. They need to put a post on each corner and every 6 feet on a side. How many posts do they need?
9. Gina has 12 packages of beads. Each package has 35 beads. How many beads does Gina have?
10. Dave has 72 stamps to put on 9 pages in his stamp collection. How many stamps should he put on each page if he wants the same number of stamps on each page?



Show your work and/or explain your thinking for each problem.

Set 15

1. Science club needs to sell 534 tickets. If it has already sold 176 tickets to adults and 65 tickets to children, how many more tickets does it need to sell?
2. Sylvia can purchase her lunch at school. Each day she wants to have milk that costs 45¢, a sandwich that costs 80¢, and fruit that costs 30¢. Her mother has only \$1.00 bills. What is the least number of \$1.00 bills that her mother should give her so she will have enough money to buy lunch for 5 days?
3. Johnathon wants to buy a notebook that costs \$2.69, including tax. If he has a \$5 dollar bill, how much change will he get back?
4. The orchestra members have a goal to sell 500 candy bars. If they have sold 246 so far, how many more candy bars do they have to sell to reach their goal?
5. Mr. McKenzie's 4<sup>th</sup> grade class is trying to collect 350 soup can labels to help get some new science equipment. In the first week the students collected 80 labels, and in the second week they collected 72 labels. How many more labels do they need to reach their goal?
6. On Saturday, Maria made some cookies. On Sunday she made 12 cookies. On Monday she made 24 cookies. Maria took all 50 cookies that she made to a party. How many cookies did she make on Saturday?
7. Troy delivered 29 newspapers on Monday. He delivered 63 papers on Tuesday. He delivered 21 papers on Wednesday. How many more papers did he deliver on Tuesday than he did on Monday and Wednesday combined?
8. Nan put 2 puppies in a dog carrier. The carrier with the puppies weighed 15 pounds. Each puppy weighed 6 pounds. What was the weight of the carrier without the puppies?
9. Carl has 21 model cars that he wants to display in a case with 5 shelves. He wants to use all 5 shelves. If he wants to put either 3 or 5 cars on a shelf, how many shelves should have 5 cars?
10. The new computer lab at Addison Elementary School has 5 rows of computers with 6 computers in each row. How many computers are there in the new lab?

Show your work and/or explain your thinking for each problem.

Set 16

1. Chris has 84 photographs to put in his album. If 9 photographs will fit on each page, how many pages will he need?
2. Laura had three apples and she cut each apple into sixths. How many pieces of apple did she have?
3. Carlos has 2 empty egg cartons and 19 eggs. If each carton holds 12 eggs, how many more eggs are needed to fill all 2 cartons?
4. Marysol buys three calculators that cost \$5.00 each. If there is no tax, how much change will she receive from a \$20 bill?
5. How much change will John get back from \$5.00 if he buys 2 notebooks that cost \$1.50 each?
6. Troy spent \$70 to feed his 2 dogs for 5 weeks. How much did he spend each week on each dog?
7. A school ordered 6 computers for the office. Each computer weighed 35 pounds. The cart to carry the computers to the office can only hold 200 pounds. Can the cart be used to carry all 6 computers to the office? Explain.
8. An orchard has 2 times as many apple trees as peach trees. If there are 42 peach trees how many trees are there all together in the orchard?
9. Movie tickets cost \$5.00 each. Last month, Arthur spent \$15 on movie tickets. Her brother, Karim spent \$10. How many tickets did they buy in all?
10. Ben and his father are packing pears grown on their farm. They pack 48 pears in each box. Each tray in the box holds 8 apples. How many trays are there in each box?

Show your work and/or explain your thinking for each problem.

Set 17

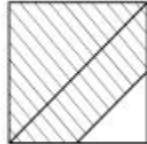
1. Joseph ate  $\frac{1}{3}$  of a pizza. Sarah ate  $\frac{1}{3}$  of another pizza. Joseph said that he ate more pizza than Sarah. Sarah said they both ate the same amount. Explain how they could both be right. Use diagrams and words.

2. Which drawing shows  $\frac{3}{4}$  of the picture shaded? Explain your choice.

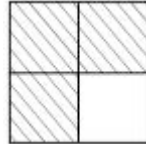
A.



B.



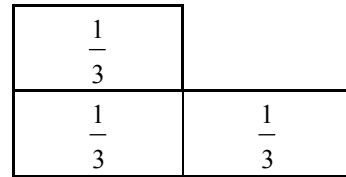
C.



D.

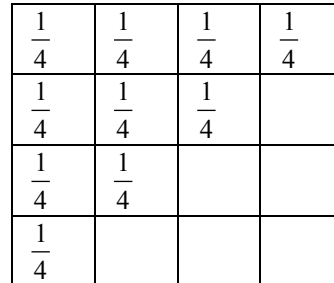


3. Use the fraction strips at right to fill in the blank.  
Use  $<$  or  $>$  to make a true statement.  $\frac{1}{3}$  \_\_\_\_\_  $\frac{2}{3}$



4. Write the following fractions in order from greatest to least.  $\frac{5}{7}, \frac{1}{7}, \frac{6}{7}, \frac{3}{7}$

5. Explain how you know that  $\frac{7}{12}$  is less than  $\frac{9}{12}$ .



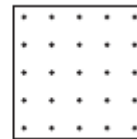
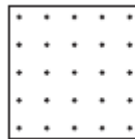
6. Use the fraction strips at right to fill in the blank.  
Use  $<$  or  $>$  to make a true statement.

$$\frac{3}{4}$$
 \_\_\_\_\_  $\frac{2}{4}$

7. Tomas has 11 boxes that weigh the same amount. Describe the method you would use to find the total weight of the 11 boxes.

8. A large package of cookies costs \$4. How many boxes can you buy for \$20?

9. Use the grids to shade one-half in two different ways.



10. Write the following fractions in order from least to greatest.  $\frac{3}{5}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}, \frac{5}{5}$

Show your work and/or explain your thinking for each problem.

Set 18

1. Find the solution to  $28 - 13 = \underline{\quad}$ , given the replacement set {13, 14, 15}
2. Jeremy bought 34 bundles of firewood. Each bundle had 9 pieces of wood. Find the solution to  $34 \times 9 = \underline{\quad}$  to find the number of pieces of firewood did Jeremy bought.
3. Find the solution to  $12 \times 12 = \underline{\quad}$ , given the replacement set {134, 144, 154}
4. Rick sold 5 houses. He made \$3500 on each house. How much money did he make all together? Find the solution to  $3500 \times 5 = \underline{\quad}$ , given the replacement set {\$175, \$1,750, \$17,500}
5. Find the solution to  $1,272 \div \underline{\quad} = 424$ , given the replacement set {3, 4, 5}.
6. Officer Moore, a police officer, walks about 1,532 miles each year. Mr. Gonzales, a postal carrier, walks about 1,057 miles each year. How many more miles each year does Mr. Gonzales walk?
7. Which fraction is larger  $\frac{1}{4}$  or  $\frac{1}{5}$ . Explain your thinking.
8. Tammy bought a book on sale for \$5.50. The poster originally cost \$7.75. How much money did Tammy save?
9. Each hour, a company makes 7,500 plastic plates and puts them in packages of 25 plates each. How many packages are made in one hour?
10. Six people are sharing two pies. Each pie has been sliced into 8 pieces. How many pieces will each person get?

Show your work and/or explain your thinking for each problem.

Set 19

1. If the letter 'm' represents the number of magazines that Paul delivers each day, write an expressions that describes the number of magazines that Paul delivers in 6 days.
2. "S" represents the number of stamps Edward had. He gave 24 stamps to his sister. Write an expression that shows the number of stamps Edward has left.
3. The letter h represents the number of hours of sleep Keana gets each night. Write an expression that describes the number of hours of sleep that Keana gets in 1 week. [1 week = 7 days]
4. Kelley wants to give 9 stickers to each of her 4 friends. To find out how many stickers she needs, she writes the number sentence  $9 + 9 + 9 + 9 = \square$ . Write a number sentence with multiplication that she could use to find the number of stickers she needs.
5. Donna made 7 batches of muffins. There were 20 muffins in each batch. Write a number sentence that could be used to find the total number of muffins he made.
6. Marcos and Luis each ran a mile. It took Marcos 9.08 minutes. It took Luis 7.43 minutes. Write a number sentence using whole numbers that Luis can use to best estimate the difference in their times.
7. Cindy planted 36 seeds. She put 9 seeds in each row. How many rows did she plant? Write an expression that you can use to solve this problem correctly.
8. There are 65 hamburgers to serve 48 children. If each child is to have at least one hamburger, at most how many of the children can have MORE than one hamburger?
9. Pedro buys 9 packages of batteries. There are 6 batteries in each package. How many batteries did Pedro buy?
10. Marvi surveyed her class. She asked each student his/her favorite type of pet. The results are shown in the table. How many more people liked dogs than fish?

Favorite Type of Pet	
Dog	12
Cat	9
Fish	5
Hamster	3
Snake	2

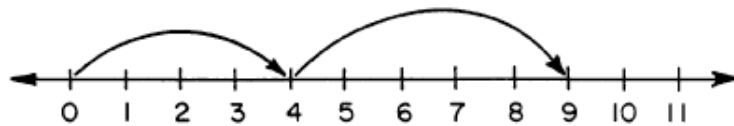
Show your work and/or explain your thinking for each problem.

Set 20

1. Louisa writes the weight of her puppy each month in the chart shown. If the pattern of the puppy's weight gain continues, how much will the puppy weigh in 5 months? Explain your thinking.

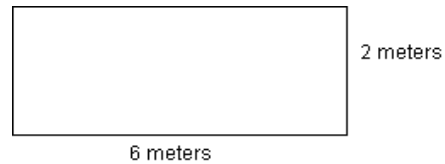
Age	1 month	2 months	3 months	4 months	5 months
Weight	10 pound	15 pounds	19 pounds	22 pounds	?

2. A rectangular carpet is 10 feet long and 7 feet wide. What is the area of the carpet in square feet?
3. Write the number sentence that matches the arrows on the number line shown.



4. Which of the following could you measure using a meter stick? Explain your thinking.  
The length of your classroom  
The length of your pencil.  
The weight of all the desks in your classroom  
The temperature in your classroom.
5. Karin is baking cupcakes. The recipe says to bake the cupcakes for 22 to 25 minutes. Which of the following is this closest to? Explain your thinking.  
**a quarter of an hour   a half an hour   an hour   an hour and a half**

6. What is the perimeter of the rectangle shown below?

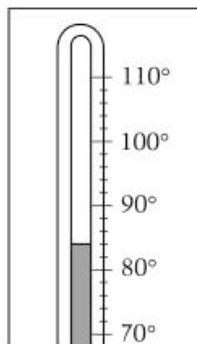


7. A tunnel is 200 meters long. How many lights are needed if there is one light at the beginning of the tunnel, one at the end, and one every 20 feet?
8. Scott and Mario spend \$4 each to go to the zoo. They spend \$12 each to go to the water park. How much more did it cost for **both** of them to go to the water park than the zoo?
9. Vito's mom bought 8 dozen cookies at the store. How many cookies did she buy?
10. Mark and Rachel are planning on painting their family room. They can't decide whether to use a yardstick or a ruler to measure the walls. Which measuring tool would be the best choice to measure the area of the family room wall? Explain.

Show your work and/or explain your thinking for each problem.

Set 21

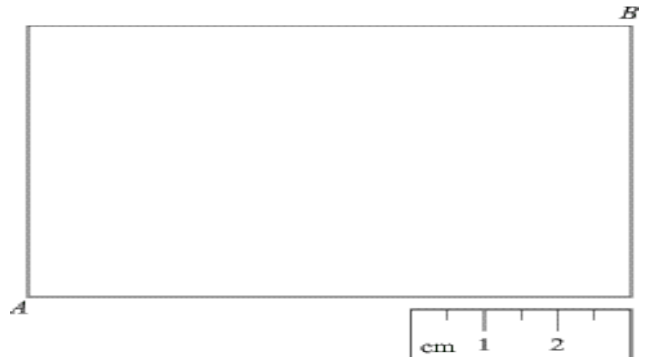
1. Which of the following is usually measured in feet? Explain  
The thickness of a penny  
The length of a paperclip  
The length of a bicycle
2. Which of the following is the most reasonable distance for a person to hike in one hour?  
4 inches, 4 feet, 4 yards, or 4 miles
3. How many feet are there in 78 inches? (12 inches = 1 foot)
4. Measure the line segment to the nearest  $\frac{1}{4}$  inch. Explain how you got your answer.  
  
\_\_\_\_\_
5. Doreen had a piece of ribbon that was 2 yards long. She cut off a piece that was 54 inches long. How much ribbon did she have left?
6. Draw a line segment that is  $5\frac{1}{2}$  inches long to the nearest  $\frac{1}{4}$  inch.
7. A relay team is made up of 4 people. Each person must run the same distance of a 2 mile race. How far does each member run?
8. Tom measured a piece of wood to the nearest  $\frac{1}{2}$  inch. Robert measured the same piece of wood to the nearest  $\frac{1}{8}$  inch. Whose measurement is closer to the actual length? Explain.
9. It takes Terry 4 minutes to walk one block on her way to school. She lives 4 blocks from school. How many minutes does it take her to walk to school each day?
10. What is the temperature on the thermometer shown below?



Show your work and/or explain your thinking for each problem.

Set 22

1. What is the length of the shorter side of the rectangle **to the nearest centimeter**? Use your centimeter ruler



For **each** of the next three problems choose one of the following four units of metric measurement to answer the question. Explain your thinking on each problem.

millimeter                      centimeters                      meter                      kilometer

- Jason went hiking for six hours. Which unit of measure is most appropriate to determine how far Jason hiked?
- Kathy went to the Redwood Forest where the world's tallest trees grow. Which unit of measure is most appropriate to determine how tall the redwood trees are?
- Asia is reading a science book about flying ants. Which unit of measure is most appropriate to determine the length of a flying ant?
- Name three things you could measure in centimeters. Explain your choices.
- Sue is 1 meter 31 centimeters tall. Pat is 145 centimeters tall. Who is taller, Sue or Pat?
- A cheetah can travel 1 km 800 m in one minute. A wolf can travel 750 m in one minute. How much farther can a cheetah travel in one minute than a wolf?
- A bus leaves the station every 20 minutes starting at 6:00 am. Becky gets to the bus station at 8:05 am. How long must she wait for the next bus to leave?
- Ms. Nelson's class held a car wash and washed 19 cars. If the class raised \$95, how much did it charge per car?
- Tyler asked the students in his class what pets they owned. Six students owned cats. Twice as many students owned dogs as owned cats. One-half as many students owned birds as owned cats. Create a bar graph to show this data.



Show your work and/or explain your thinking for each problem.

Set 23

1. The table below shows the areas of the Earth's major oceans measured in square miles. Which ocean has the greatest area? Which one has the least?

Ocean	Area in Square Miles
Pacific	64,186,300
Atlantic	33,420,000
Arctic	5,105,700
Indian	28,350,500

2. By how much would the number 9,754 be decreased if the digit 7 were replaced with a 1?
3. Allen bought 7 CDs. Each CD cost \$14. How much money did Allen spend in all?
4. Jill spent 2 hours doing homework on Monday, 1 hour on Tuesday, 1 on Wednesday, 3 on Thursday, and 1 on Friday. Use the number line to show how many hours Jill spent doing homework this week.



5. The grid below was torn off a hundreds chart. Fill in the blanks.

27				
	38			
		49	50	
				71

6. Nico drives about 300 people in his taxicab each month. If he drives 15 days each month, about how many passengers does she average per day in a month?
7. How long is the section of the ruler shown to the nearest  $\frac{1}{2}$  centimeter?

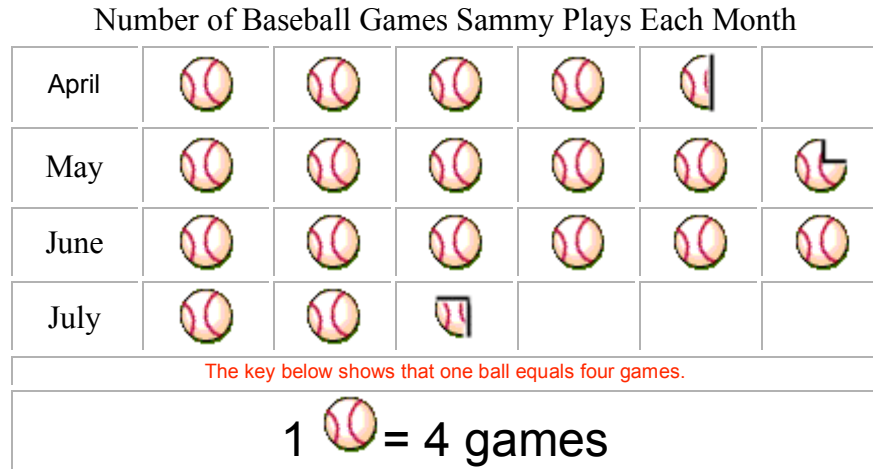


8. Music lessons cost \$18.00 per hour. Trent took lessons for one hour each day for 5 days. How much did the lessons cost Trent altogether?

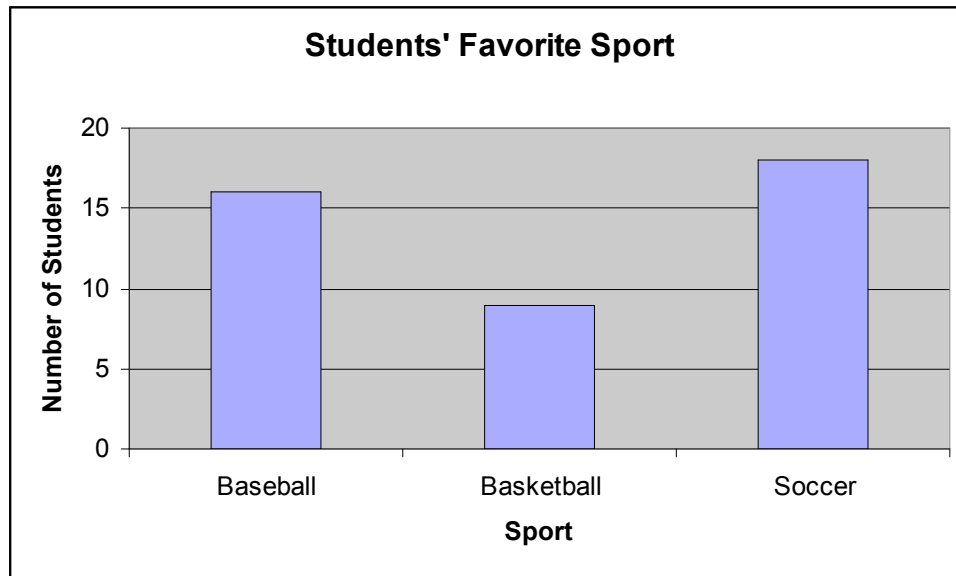
Show your work and/or explain your thinking for each problem.

Set 23 continued

9. Use the graph below to determine how many more games Sammy played in June than he did in May?



10. Use the bar graph to answer the questions below.



- A. How many students were surveyed?  
B. What sport is the most favorite? The least?

Show your work and/or explain your thinking for each problem.

Set 24

1. Use the table to create a pictograph of the data. Let a picture of 1 umbrella represent 10 rentals.

Beach Umbrellas Rented	
Monday	25
Tuesday	40
Wednesday	15
Thursday	50
Friday	65

2. How much would the number 86,459 increase if the digit 6 were changed to an 8? Explain
3. A cheeseburger has 385 calories. A hot dog has 275 calories. Yogurt has 200 calories. A cookie has 115 cookies. Which 2 items would add up to about 600 calories?

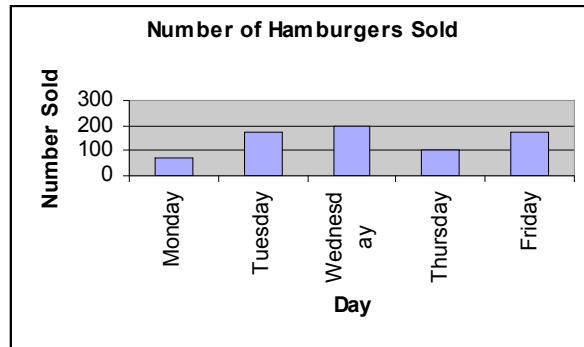
4. About how long is the ruler shown in centimeters?



5. There are 5 players on a basketball team. Three players on the team scored 9 points each, the other two scored 12 points each. How many points did they score altogether?
6. Use the table to answer the following questions:

On which day were the most hamburgers sold?

About how many more hamburgers were sold on Tuesday than on Monday?



Show your work and/or explain your thinking for each problem.

Week 24 continued

7. Use the information in the table below to create a bar graph.

Be sure to include a title and labels.

Score	Number of Students
95	50
90	125
85	150
80	100
75	20

8. Robyn surveyed her class as part of a math project and recorded the results in the table shown below. She asked people what their favorite color was. Use the table shown to answer the questions below.

Blue	10
Green	6
Orange	5
Purple	9
Red	13

How many people are in Robyn's class?

9. If twice as many people were surveyed, how many do you think would say they liked purple best?
10. Derron has \$16.00 to spend at the art supply store. He needs to buy at least two packages of paper, one box of crayons, and three paintbrushes. Does he have enough money? Use estimation to explain your reasoning?



crayons



paintbrush



paper

Paintbrush \$2.29 each

Crayons \$1.89 each

Package of art paper \$3.69 each