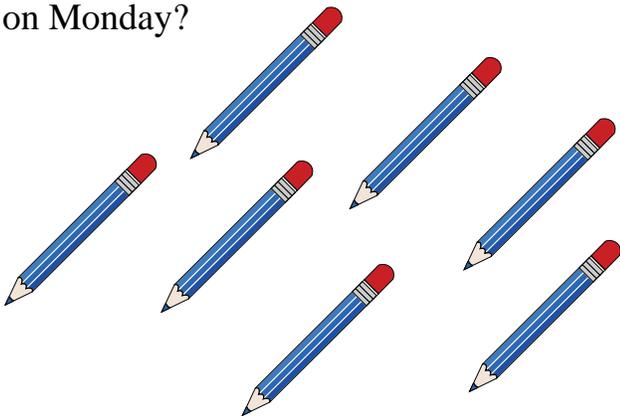


★ 1. Mrs. Hall planted 15 flowers in rows of five each. How many rows did she plant?

★ 2. On Monday, Tasha had a pocketful of pencils. On Wednesday she loaned four to her friends and had seven pencils left. How many pencils were in Tasha's pocket on Monday?



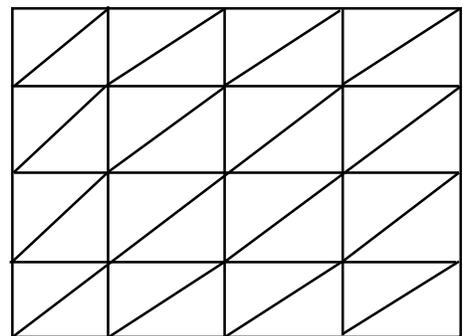
★★★★ 3. Mario got one dollar from the tooth fairy for his lost tooth. He bought one of these toys and got two coins in change.

- | | | | |
|---------|-----|-----|-----|
| Ball | 52¢ | Top | 86¢ |
| Whistle | 69¢ | Car | 74¢ |

Which toy did he buy? _____

Which coins did he get in change?

★★ 4. Aunt Rose makes quilts. She is looking for new ideas for her patterns. She would like to use two colors and arrange them so that half the quilt is blue and the other half is green. Can you help her with a design?



Strategy of the Month

*Noticing patterns helps people solve problems at home, at work, and especially in math class! Math has been called "the study of patterns," so it makes sense to look for a pattern when you are trying to solve a problem. Recognizing patterns helps you to see how things are organized and to make predictions. If you think you see a pattern, try several examples to see if using the pattern will fit the problem situation. Looking for patterns is helpful to use along with other strategies such as make a list or guess and check. How can **finding a pattern** help you solve this problem?*



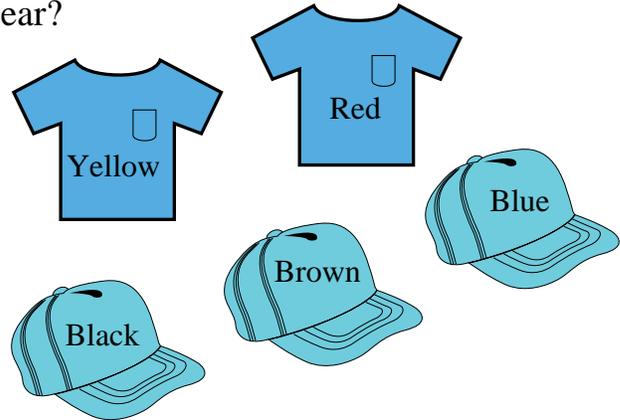
How many different rectangles can you find in the figure on the left?

MathStars Home Hints

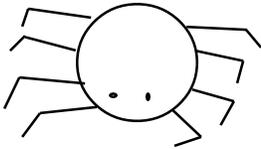
Set aside a special time each day to study. This should be a time to do homework, to review, or to do extra reading. Be organized and have a special place in which to work. This place needs to have a good light and to be a place where you can concentrate. Some people like to study with quiet music; others like to sit at the kitchen table. You need to find what works for you!

Remember that when you are reviewing or working on solving problems it may help to study in a group.

★★ 7. Mark has a red shirt and a yellow shirt. His hats are black, brown and blue. How many different outfits could Mark wear?

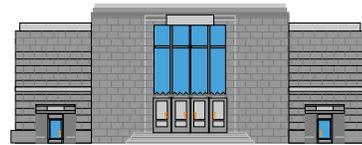


★★★ 5. Mike likes to collect spiders. Fill in the chart to show how many eyes and legs he sees on his spiders.



Spiders	Eyes	Legs
1		
2		
3		
4		

★ 8. If Sean takes 24 one dollar bills to the bank, how many ten dollar bills will the bank give her in return?



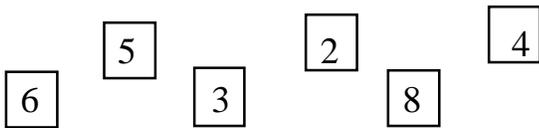
★★★ 6. Joe can walk eight blocks in ten minutes. How far can he walk in 30 minutes? _____

Setting Personal Goals

If your goal is to become a more responsible student, it means that you

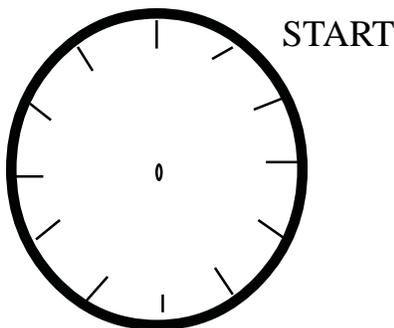
- *actively participate in class.*
- *complete your assignments.*
- *have everything you need in class.*
- *ask for help when you do not understand.*
- *be willing to investigate new ideas.*

★ 1. What is the largest three-digit number Anna can make using these number tiles?

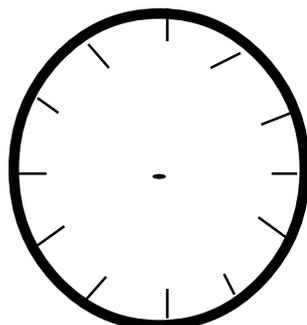


What is the smallest three-digit number she can make?

★★ 2. Ray and Kim started raking leaves at noon. They finished in three and a half hours. Draw hands on the clocks to show when they started and when they finished.



FINISH



James is putting his baseball cards in an album that holds 500 cards. He has 180 rookie cards and 234 player cards.

★★ 3. How many more cards does he need to fill his album? _____

★★ 4. How many more player cards does he have than rookie cards? _____

★★★★ 5. When James decides to buy more cards to fill his album, he wants to buy an equal number of player cards and rookie cards. How many of each will he buy? _____

Strategy of the Month

*Sometimes mathematical ideas are hard to think about without something to look at or to move around. Drawing a picture or using objects or models helps your brain "see" the details, organize the information, and carry out the action in the problem. Beans, pennies, toothpicks, pebbles, or cubes are good manipulatives to help you model a problem. You can use objects as you guess and check or look for patterns. Try **using objects** to help you solve this problem:*

A factory has wheels for carts and scooters. If they have 18 wheels, how many of each can they make? Is there more than one answer?

MathStars Home Hints

Remember when you had "Show and Tell" in kindergarten? Now you have a great deal to share in mathematics. Talk to the folks at home about what you are learning. Show them your papers and tell them about what is happening in your math class. Let them see that you are doing problems in class similar to these. Each week choose an assignment that you are proud of and display it somewhere in your house.

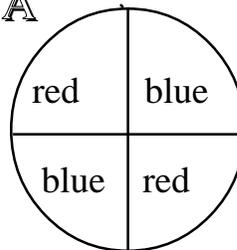
★★★ 6. Jeff likes to stack his pennies into two piles that are the same height. He knows that if he has an **even** number of pennies he can make two equal piles. If the piles are not even then he knows he has an **odd** number of pennies.

Use Jeff's method and tell if the pennies are even or odd:

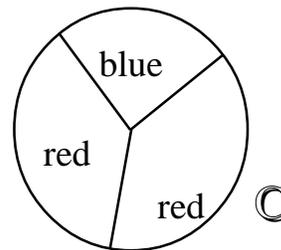
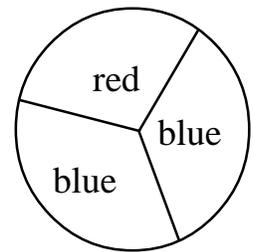
Number of Pennies	Even or Odd
17	_____
18	_____
23	_____
30	_____
36	_____

★★★★ 7. Mary is playing a game at the school fair. She will win a prize if the spinner lands on red. She may choose which spinner to play. Which spinner should she choose to win?

A



B



C

★ 8. Debbi is collecting nickels in a jar. She has 65 cents so far. How many more nickels does she need to make one dollar?

Setting Personal Goals

Mathematics is all around us. We use it every day in personal living and in all of our school work. When we read graphs in social studies, gather and use data in science investigations, or count in music or physical education, we are using mathematics. We make connections in our math classes also; for example, measurement skills help us in solving many geometry problems and classification skills help us in organizing data. We use computation in many different situations. You will become a stronger mathematics student by making connections.

★★★ 1. Ashley, Bob, Tawana and Zack have ordered a large pizza. Show two different ways that the pizza could be cut for each person to have equal shares.



★★★★ 2. Tyler is a second grader who plays soccer on Wednesdays and takes Karate lessons on Tuesdays and Saturdays. Look at the calendar to help him plan his month.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

How many soccer matches will he play this month? _____

How many Karate lessons will he have? _____

His birthday is on the third Friday. What is the date of his birthday? _____

★★★ 3. At the math center students were estimating how much they could hold in one hand. Use the words in the box to complete the sentences below:

a single	a lot of
a couple	zero

I can hold _____ pennies in my hand.

I can hold _____ goldfish in my hand.

I can hold _____ walnuts in my hand.

I can hold _____ bikes in my hand.

Strategy of the Month

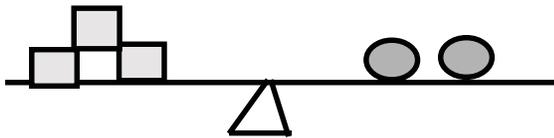
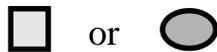
When a problem involves data with more than one characteristic, **making a table, chart, or graph** is a very good way to organize the information. It helps your brain to identify patterns and to discover any missing data. Tables help you record data without repeating yourself. Making a table or chart is especially useful for certain problems about probability and for some logic problems. Sometimes tables and charts are included in your information and you need to read through them carefully to understand the data you need to solve your problem. Creating a graph is also a good way to organize and visualize information. **Make a table** to solve this problem: Loni has red, blue, green and yellow markers. She is coloring the 2 stripes on the new soccer team flag. How many different flags can she color?



MathStars Home Hints

Everyone learns from sharing, and you can continue to learn by teaching others about the new mathematics ideas you are learning. Become a teacher and help a younger student. Explain what you have learned and what else you want to know. Good teachers set goals and evaluate the progress made toward reaching these goals. You will continue to be a learner whenever you become a teacher.

★★ 4. Which weighs more?



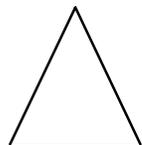
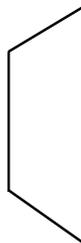
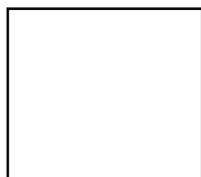
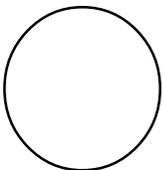
★ 5. The Ace Wheel Company has 30 wheels ready for the factory.

How many bicycles can they make? _____

How many tricycles can they make? _____

How many wagons can they make? _____

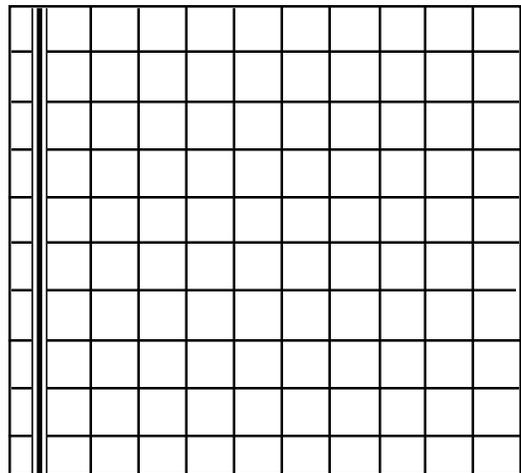
★ 6. Draw a line of symmetry for each picture:



★★ 7. Milk costs 30 cents in the lunchroom. How much milk money does Linda need for a school week? _____

★★ 8. Students in Ms. Cutler's class recorded the daily weather for two weeks. Make a bar graph to show their data.

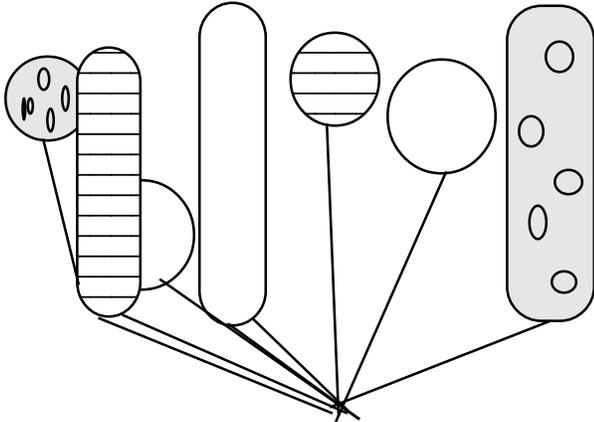
rainy, cloudy, sunny, sunny, sunny, cloudy, sunny, sunny, rainy, sunny



Setting Personal Goals

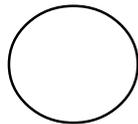
Perseverance means that you do not give up easily. Good problem solvers try different strategies when they are stumped and are not discouraged when they cannot find an answer quickly. They stick to the task, using all of their previous experiences to make connections with what they know and the problem they are trying to solve. If something does not work, they discard the unsuccessful idea and try again using a different strategy.

★ 1. Mr. Bobo, the balloon man, had this bunch of balloons at the carnival.



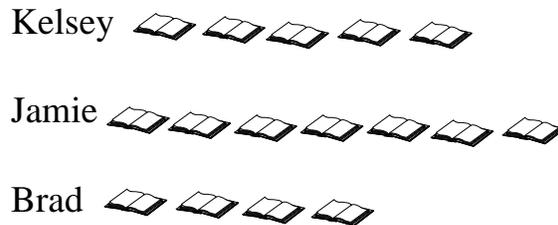
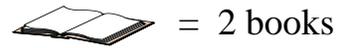
Fill in the blanks to describe his balloons:
 _____ out of _____ balloons are round.
 _____ out of _____ balloons are long.
 _____ out of _____ balloons have dots.
 _____ out of _____ balloons are plain.

★★★ 2. Juan had 79 marbles in his box. Mark had 124 marbles in a can and Tom had 98 marbles in a sack. How many marbles did the three boys have?



★★★★ 3. It usually takes Mr. Gordon two hours of mowing to cut his lawn. On a very hot summer day, Mr. Gordon mows for 30 minutes and then rests for 30 minutes. If he started at 10:00 a.m., at what time did he finish?

★★★★ 4. The students in Mrs. Alvarez's class made a pictograph to record the books they read at home.



How many books has Jamie read? _____

How many more books has Kelsey read than Brad? _____

Strategy of the Month

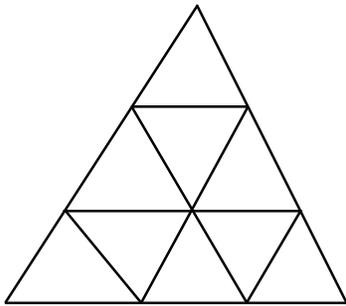
*Some problems are difficult to "see" even if you draw a picture. For these problems, it can be helpful to actually **act out the problem**. When you role play with friends or people at home, you may discover the solution as you act out the problem. Or you may recognize another strategy that will help you find the answer. Sometimes "acting out" a problem can be done with manipulative materials. To find the solution to the problem below, become the director and choose your cast to act this out:*

Freddy Frog is at the bottom of the stairs. He can move up three steps each time he hops. The pool is at the top of the stairs. If Freddy Frog hops five times before he is in the pool, how many stairs to the pool?

MathStars Home Hints

Calculators are important tools. They do not replace mathematical thinking; you must tell the calculator what numbers and operations to use. Calculators allow students to focus their energies on solving problems and to easily try alternative solutions. They also allow students to solve problems that were too difficult for pencil and paper. Number sense and good estimation skills are important when students use technology to carry out computations. Explore some "what if" situations with the calculator. "What if the cost of gas goes up 4¢... What if we build the patio 2 feet wider..."

★★★★ 5. How many triangles can you find in this figure? Watch for all sizes!!

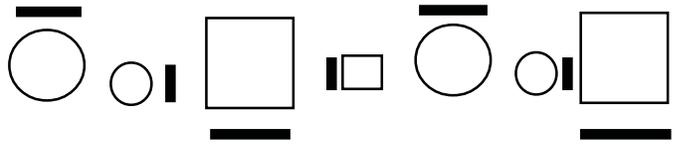


_____ triangles

★★ 6. Toby emptied his bank and found that he had saved three quarters, two dimes, two nickels, and four pennies.

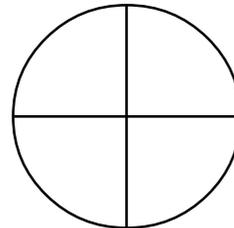
How much money had he saved? _____

★ 7. Study this pattern:

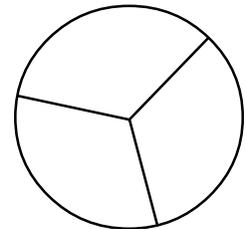


Draw the next shape here: _____

★★★ 8. Barry likes all kinds of pizza. He is very hungry. His mother cut the pepperoni pizza into four pieces and the sausage pizza into three pieces. She said he could have only one slice of pizza before supper. Which kind of pizza do you think he chose? _____
Why? _____



pepperoni



sausage

Setting Personal Goals

Accuracy is very important to everyone. Pharmacists must always measure accurately when preparing prescriptions and carpenters must cut supporting boards precisely to fit. Careless mistakes may be avoided in the classroom by computing carefully, checking back over work, and writing numbers clearly and neatly. Remember: If work is worth doing, it is worth doing well.

★ 1. Billy has collected 46 baseball cards. How many more does he need to have a collection of 100 cards?

★★ 2. Coach Long can ride his bike about two miles in 15 minutes. About how far could he ride in an hour?

★★ 3. Follow the clues to find the mystery number:

I am less than
 $10 + 23$

I am greater than
 $12 - 5$

I am present when
you count by threes
and by eights

Who am I ??

★ 4. Students lined up their dogs by weight at the Community's Annual Dog Show.

Bo was 76 pounds, Spot was 48 pounds, Lucky was 67 pounds and Blacky was 58 pounds.

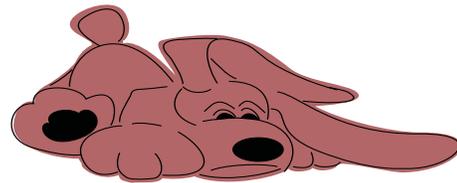
Write the dogs' names in their proper places.

first

second

third

fourth



Strategy of the Month

*What do you do if you have a problem that seems to be very complicated? It may have a lots of large numbers, too much information, or multiple conditions. One approach is to create a simpler problem like the one you need to solve. As you solve the easier problem, you may see the way to solve the more difficult one. Or you may discover a different process that will work with the harder problem. The trick is to be sure that your simpler problem is enough like the original one that the patterns or process you use will help you with the harder situation. **Make a simpler problem first as you solve this:** Six soccer players will shake hands before the game begins. How many handshakes will there be? {Suppose there are only three players; four players.}*

MathStars Home Hints

Math skills develop as you apply concepts learned in school to real life situations.

Which product is the best buy? How many tiles will it take to cover the kitchen floor?

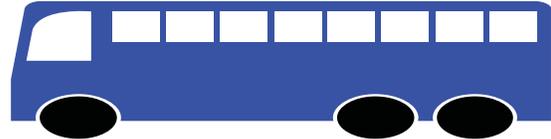
What time should we start baking the turkey so that we can have dinner at 7 p.m.? What do the statistics tell us about the two baseball players?

★★★ 5. Complete the chart to show different ways to have 20 cents.

Pennies	Nickels	Dimes
20	0	0
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

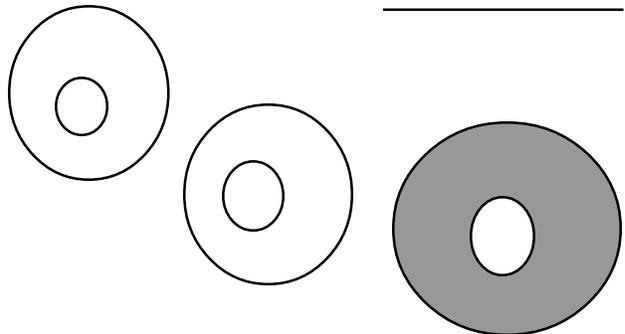
★★ 6. Mrs. Hill shopped at the grocery store. She bought milk for \$2.39 and bread for 99 cents. Her tax was 14 cents. How much change should she receive if she gave the clerk a five-dollar bill?

★★★ 7. The 192 second grade students at Greene Elementary School are planning a trip to the History Museum. If each bus hold 52 passengers, how many buses should they order?



★★★★ 8. The chess team served refreshments at their last meeting. There were two dozen doughnuts for the two teams. When all the doughnuts were eaten, it was discovered that the winning team had eaten twice as many doughnuts as the losing team.

How many doughnuts did the winning team eat?



Setting Personal Goals

Confidence means that you believe in yourself. You can become a more confident problem solver by learning to use a variety of strategies. If your first idea does not work, don't give up; just try another way! Working with a buddy also helps. You need to remember that there is usually more than one way to solve a problem and that practice always helps us learn.