

3rd Grade Math Problems

- Number Sense
- Measurement
- Geometry
- Algebraic Sense
- Probability
- Logic
- Problem solving strategies



ALL of your answers in this math packet require you to write to help explain your best thinking using words, numbers, or pictures.

Third Grade Number Sense

3N-39

Jill bought 2 packages of crayons for 59 cents each. She also bought one package of crayons for 45 cents. How much did Jill spend?

3N-38

Joe collects coins. He has 84 coins in his collection. There are 14 dimes and 30 quarters. The rest are pennies. How many pennies?

3N-37

Three friends shared a pizza. Tim ate $\frac{2}{6}$ of the pizza. Kate ate $\frac{3}{6}$. How much pizza is left?

3N-36

Pam's car holds 10 gallons of gasoline. After filling the tank, she drove to the beach. She had used 8.6 gallons. How many gallons are left in her gas tank?

3N-35

Ed and Jason are hiking 1 mile to a waterfall. They walk .5 miles to a bridge. Then they walk .3 miles to a river. How much farther do they have to walk to the waterfall?

3N-34

Ruth, Roz, and Gladys bought two boxes of golf balls. Each box contains five sleeves of three balls in each. How many golf balls will each person get?

3N-33

There are 10 children in the art club. The teacher put them into groups, so that each group has the same number of children. How many groups could there be? How many children will be in each group?

3N-32

When Alex got on the school bus, there were 3 other children on the bus. At the next stop, 3 more children got on the bus. How many children were now on the bus?

3N-31

Edna loves cookies. She had 4 cookies. She ate 2 of the cookies, and her mom gave her another one. How many cookies does she have now?

3N-30

Phoebe was putting her collection of postage stamps into a scrapbook. She put one stamp on the first row. She put 3 stamps on the second row. She put 5 stamps on the third row. How many stamps do you think Phoebe will put on the next row? Why?

3N-29

A basket contains more than 12 but fewer than 32 eggs. When you count the eggs by fours, you have three left over. When you count by fives, you have two left over. How many eggs are in this basket?

3N-28

John and Jean have a foot race starting with their right feet at the starting line, stepping forward on the left foot. If John takes two steps to every three Jean takes, when will their right feet hit the ground together again?

3N-27

Apple juice was served at the picnic. Each of 3 girls poured 9 glasses of juice. How many glasses of juice were there?

3N-26

Patty bought 6 packages of paper plates. There were 8 plates in each package. How many plates did she buy?

3N-25

Tabby Tiger roars every time someone passes her home in the zoo. One day the zookeeper kept track of how many times Tabby roared in one hour. Here are the clues he gave: Tabby roared more than 39 times; she roared fewer than 46 times; she roared an odd number of times; you say the number when you count by threes and by fives. How many times did Tabby roar in one hour?

Third Grade in Measurement Temperature

3M-32)

Place each number below in the blanks to create the most meaningful and realistic story.

5	48	85	32	16	94	120

The high temperature yesterday was _____ degrees Fahrenheit, the highest it has been for the past _____ days. The low temperature was _____ degrees Fahrenheit, about half the high, and only _____ degrees above freezing, (which is _____ degrees Fahrenheit). Tomorrow's temperature is predicted to be _____ degrees Fahrenheit, which is _____ degrees lower than yesterday's high.

3M-31

Place each number below in the blanks to create the most meaningful and realistic story.

90	5	40	10	50	85
----	---	----	----	----	----

The high temperature recorded yesterday was _____ degrees Fahrenheit for Riverton and _____ for Oakdale. These temperatures differed by

_____ degrees, with Riverton being hotter. At night Riverton had a low temperature of _____ degrees, while Oakdale's low temperature of _____ degrees was _____ degrees more than Riverton.

3M-30

Time

Third graders were planning a class party. They made a list of activities they like. Their party will be from 2:00 to 3:00 p.m. Help them choose activities and make a schedule for their party.

Musical chairs	15 minutes	Party Schedule 2:00 3:00
Decorate cookies	20 minutes	
Costume contest	10 minutes	
Piñata	15 minutes	
Scavenger hunt	20 minutes	
Apple bobbing	20 minutes	
Jokes	10 minutes	
Clean up	10 minutes	

Linear Measurement

3M-29

A snail and a turtle both started out on Monday toward a pond 32 inches away. An owl was watching them and told them how far they were at the beginning of each day of the race. By Tuesday both the snail and the turtle had 1 inches. By Wednesday the snail had traveled 2 inches, and the turtle had crawled 7 inches. By Thursday the snail was 4 inches from the start, and the turtle was 13 inches from it. By Friday the snail was 8 inches from the start, and the turtle was 19 inches from it. If the snail and the turtle kept moving in the same ways, on what day will each animal reach the pond?

3M-28

Tom is 4 feet tall. His brother, Hal, is 4 inches taller. How many inches tall is Hal?

3M-27

The four-square court measures 15 feet on each side. How many yards is that?

3M-26

Ann's new pencil was 18 centimeters long. After 2 weeks, her pencil was only half as long. How many centimeters was Ann's pencil then?

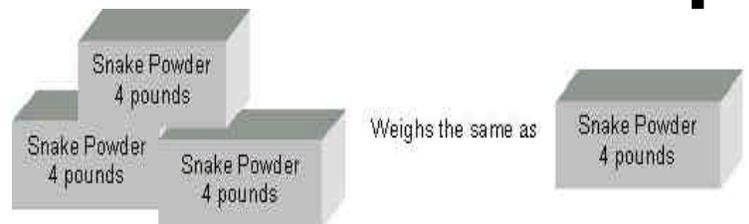
3M-25

John lives in Milton, and he decides to visit his friend in Colville. It's 21 miles from John's house to his friend's house. First he walks 1 mile to the bus station. Then he rides the bus 18 miles to Colville. He walks the rest of the way to his friend's house. How many miles does John walk altogether to get to his friend's house?

Weight

3M-24

Three boxes of snake powder weigh the same as one box of snake powder and one can of lizard tears. How much does one can of lizard tears weigh?



3M-23

The giant weighed some of the giant vegetables that grew in his garden. He weighed a tomato, an ear of corn, a turnip, and a carrot. The carrot was 8 pounds less than the turnip, and the turnip was 3 pounds more than the ear of corn. The ear of corn weighed half as much as the tomato. The giant rolled the tomato onto the scale. It was 18 pounds. How much did the carrot weigh?

3M-22

Martha's math book weighs 14 ounces. Her social studies book weighs 20 ounces. How many pounds and ounces do Martha's books weigh together?

3M-21

The rhinos at the zoo weigh about 800 pounds each. About how many rhinos can be carried in a truck that holds 2 tons?
(Hint: 2000 lbs. =1 ton)

Volume

3M-20

Hank is selling lemonade. He makes 2 quarts. How many cups of lemonade does Hank have to sell?

3M-19

Jenny is making cookies. Her recipe is below. How can Jenny change her recipe to make 24 cookies?

Sugar Cookies
1 cup flour 1/2 cup sugar 1/3 cup butter
Mix the flour, sugar, and butter.
Roll into balls. Bake 10 minutes
Makes 8 cookies.

Area and Perimeter

3M-18

Kris built a fence for her dog's play area. The fence is 10 feet long and 3 feet wide. How many feet of fencing did Kris use?

3M-17

Ron's room is 9 feet long and 8 feet wide.
How many square feet of carpet does he
need to cover the floor?

Money

3M-16

Abby mailed 6 postcards at 19 cents each
and 3 letters at 29 cents each. How much
did she pay in postage?

3M-15

In how many ways can you have 45 cents
with 5 coins?

3M-14

Kristi has \$1 in her pocket made up of seven coins. Show at least two possible combinations for those seven coins.

3M-13

Ezra wants to watch a television program that will begin at 9:00 P.M. His mom says he can watch it but he must first do his chores and finish his homework. It takes him half an hour to do his chores and another half an hour to finish his homework. At what time must Ezra begin if he is to finish in time to watch the program?

3M-12

If it takes 20 minutes to cut a log crosswise into 5 pieces, how long would it take to cut a log into 10 crosscut pieces?

3M-11

The solar eclipse began at 2:13 in the afternoon and ended at 3:51 p.m. How long did the eclipse last?

3M-10

Maggie went to a movie. She paid \$2.00 for her ticket, \$1.25 for popcorn, and \$.75 for a drink. How much did Maggie spend at the movie?

3M-9

Scott saved up enough money to buy a "growing rope" at the magic shop. The price of the rope was 22 cents. Scott paid for the rope with coins. How many different groups of coins could Scott have used to pay for the rope?

3M-8

Sam saved nickels and dimes until he had 55 cents to buy the game of Beast and Beetles. Sam paid for the game with 8 coins. How many of each kind of coin did Sam have?

3M-7

"This costs 26 cents," said the girl as she gave the dinosaur stamp to Michael. Michael took coins out of the pocket of his jeans and gave them to the girl. How many different groups of coins could Michael have used to pay for the dinosaur?

3M-6

The Acrobat Bears are stuffed bears. Zeke Bear is the tallest. Yolanda is 3 inches shorter than Zeke. Wanda is 3 inches shorter than Yolanda. Un is 3 inches shorter than Wanda, and Timothy is 3 inches shorter than Un. Timothy Bear is 6 inches tall. If you stood the bears on top of each other, how high would the bear tower be?

3M-5

Tulips cost 20 cents, daisies 5 cents, daffodils 10 cents, roses \$1, and lilacs 50 cents. Arrange the flowers so that the least expensive ones will be on the left-hand side, and the most expensive ones on the right-hand side. Becky has \$1.00. How many of each flower can she buy?

Tulips___Daisies___Daffodils___Roses___Lilacs___

3M-4

Trucks cost \$1. Kites cost 10 cents and marbles cost 1 cent. Elizabeth bought 2 trucks, 5 kites, and 8 marbles. Glen bought 1 truck, 10 kites, and 12 marbles. Hester bought 3 trucks, 15 kites, and 20 marbles. How much did each one spend?

3M-3

Mary gave Tim enough money so that Tim had twice Simon. How much was left for Mary? Simon has four quarters and five dimes. Tim has six quarters and four nickels. Mary has one quarter, ten dimes, and three pennies. Show this on a chart and write a word problem to go with it.

3M-2

Ivan has 50 cents. Krista has one half of that. Luigi has 10 cents more than Krista. Nicholas has twice as much as Luigi. Quentin has 30 cents less than Nicholas. Fill in the graph to show how much money each person has.

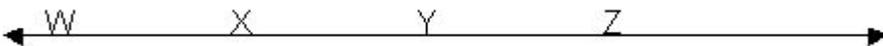
3M-1

How many ways can you make 25 cents?

Third Grade Geometry

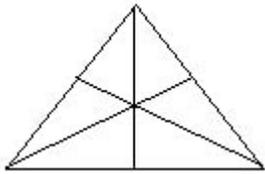
3G-16

How many line segments can you find in the line below?



3G-15

How many triangles can you find?



3G-14

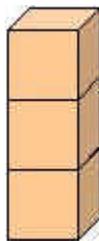
I am a 3-dimensional figure. My base is a triangle. My top is a point. I have 4 faces. What am I?

3G-13

I am a 4-sided polygon. Two of my sides are equal lengths. Two of my sides are parallel. What am I?

3G-12

Walter has a set of building blocks. Each block is a rectangular prism. If Walter builds a tower with 3 blocks stacked up, how many edges will the building have? How many faces?

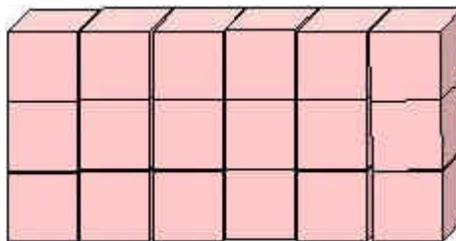


3G-11

Scott has 24 meters of fence and wants to make the biggest rectangular yard possible for his dog to run in. What length should he make each side of the yard?

3G-10

Little Pig got 24 bricks and built a wall along one side of his garden. The wall was 4 bricks high and 6 bricks across. Little Pig painted the wall. He painted the exposed faces of the bricks. How many faces of bricks did Little Pig have to paint?



3G-9

Ronald Rabbit began to draw a map for his cousin. He said, "Here we are at the potato field on Lettuce Lane. Go forward 6 blocks to Radish Road and turn right. Then go forward 4 blocks and turn left on Squash Street. Go forward 3 blocks to Apple Avenue and turn right. Then go forward 4 blocks to Bean Boulevard. My home is under the oak tree on that corner. Ring the bell and I'll let you in." Can you show the path from the potato field to Ronald Rabbit's home?

3G-8

Hal and his friends went digging for dinosaur teeth. They dug all along their path. They started at their tent and walked north 5 feet toward the mountain. They turned east toward the river and walked ahead 5 feet. They turned south toward the fence and walked 3 feet. Then they turned west toward the trees and walked 4 feet. Finally they turned south toward the fence and walked 2 feet. There they dug up a dinosaur tooth! How far was the dinosaur tooth from their tent?

3G-7

Will gets on the elevator in a very tall building. Will is carrying five pizzas. He goes up to the 8th floor, gets off the elevator; and delivers a pizza. He gets back on the elevator; goes down 4 floors, and delivers another pizza. He gets back on the elevator; goes up 11 floors, and delivers another pizza. He gets back on the elevator and goes up 5 floors to the top floor of the building. He delivers his last 2 pizzas on that floor. How many floors are there in the very tall building?

3G-6

There's a parking lot in the Taylor's family room. Six model cars are parked in the lot like a 2x3 grid. The red car is parked in front of the green car. A black car is parked between the green car and a yellow car. A blue car is parked on the right side of the red car; and an orange car is parked in front of the yellow car. What color is each car in the parking lot?

3G-5

Gary made a long tunnel of cardboard boxes in his backyard. He got 15 boxes. He cut 2 sides off each box. Then he put the boxes together in a long row. One night it rained. All the sides of the boxes that were not touching the ground got wet. How many sides got wet?

3G-4

Sam put newspapers in 6 of the 9 mailboxes (arranged in a 3 by 3 grid) at the Pine Apartments. He put one paper in each of 6 boxes. When he finished, there were 2 newspapers in each row and in each column of boxes. Draw a picture of a way that Sam could have placed the newspapers.

3G-3

Georgina had 3 pennies, 3 nickels, and 3 dimes. She put them in 3 rows and 3 columns. When she finished, there was one penny, one nickel, and one dime in each row and in each column. Where did Georgina put each of her coins?

3G-2

Make pictures of 15 shapes. $\frac{1}{5}$ of the shapes are circles. $\frac{2}{5}$ of the shapes are rectangles. $\frac{1}{5}$ are triangles. The rest are squares. How many shapes are rectangles? How many shapes are squares?

3G-1

Draw a shape that has five angles. Divide it into triangles.

Algebraic Sense Problems - Third Grade

3A-26

What 2-digit number is three times the sum of its digits?

3A-25

Dylan's mother offered to pay him to carry 14 bags of leaves to the compost pile. Dylan said he would do it if she would pay him 5 cents for the first bag, 10 cents for the second, and so on, doubling the amount with each bag. His mother only smiled and shook her head. How much would she have to pay?

3A-24

Some scientists believe they saw 52 meteors and others believe they saw 27. How many more did one group supposedly see than the other?

3A-23

A crew of spiders moved into the scary old house and started working at once. They spun 2 webs on the first night, and 7 webs on the second night. On the third night they wove 12 webs. Every night they made 5 more webs than they had made the night before. If the spiders kept spinning in this way, on what night did they spin their 60th web?

3A-22

Al already has 16 more chips than John has. Al and John are playing a game with their friends. John and Al have won 44 chips altogether. How many chips has each boy won?

3A-21

Lyn and her friends made a pile of 31 snowballs this morning. Then the sun came out. It melted 1 snowball in the first hour, 2 snowballs in the second hour; and 4 snowballs in the third hour. Each hour the sun is melting twice as many snowballs as it did the hour before. If the sun keeps melting snowballs in this way, how many hours in all will it take the sun to melt the whole pile of snowballs?

3A-20

Bowser, poor dog, has lost his collar; so he has a few uninvited fleas and ticks in his house. Each flea has 6 legs, and each tick has 8 legs. Not counting Bowser's legs, there are 48 legs in Bowser's house. There are the same number of flea legs as tick legs. How many fleas and how many ticks are there in Bowser's house?

3A-19

Papa's Pizza Place just opened for business. The good smells bring people into Papa's for pizza. Papa's sold 9 pizzas on the first day, 15 pizzas on the second day, and 21 pizzas on the third day. On the fourth day, Papa's sold 27 pizzas. Papa's business kept growing in the same way for a long time. How many pizzas did Papa's Pizza Place sell on the tenth day?

3A-18

Something terrible is happening in the third grade at Summers-coming School. A few students got the wigglegigs on Monday, and it seems to be spreading. On Tuesday, 2 more students caught the wigglegigs than on Monday. Each day after that, 2 more students caught the wigglegigs than the day before. On Friday, 12 students caught the wigglegigs. How many students caught the wigglegigs in five days?

3A-17

Marlon was saving his money to buy a drum. He was earning money by pulling weeds in his neighbor's garden. He earned \$0.50 the first week, and \$1.00 the next week. The next week he earned \$1.50, and he put it with the rest of his money. Each week he earned \$0.50 more than he had earned the week before. If Marion kept earning money this way, in what week would he have a total of \$10.50?

3A-16

Sarah and Kay are both collecting baseball cards. On Monday each of them got 3 cards. The next day Sarah got 5 and Kay got 4. On Wednesday Sarah got 7 and Kay got 6. On Thursday each girl got 9. If Sarah and Kay keep getting cards in the same way, how many cards will Kay get on the day that Sarah gets 15?

3A-15

When the leaves turned color, Hal and Dan began to sell pumpkins. On the first day, Hal and Dan each sold one pumpkin. The next day Hal sold 2 pumpkins and Dan sold 4. On the third day Hal sold 4 pumpkins and Dan sold 7. On the fourth day Hal sold 7 and Dan sold 10. If Hal and Dan kept selling pumpkins in the same way, how many pumpkins did Hal sell on the day Dan sold 19?

3A-14

When Daryl was 11 years old and his sister, Coralee, was 3, they watched a television show about hot-air balloons. Daryl started saving his money. When Daryl was twice as old as Coralee, he took her on a ride in a hot-air balloon. How old were Daryl and Coralee when they rode in the balloon?

3A-13

Dean works with baby animals at a zoo. This week he measured a giraffe, an ape, and a tiger. The tiger had grown 4 inches less than the giraffe. The giraffe had grown twice as much as the ape. The baby ape had grown 6 inches since it was measured the last time. How many inches had the tiger grown?

3A-12

Annie and Rob were playing a board game. During the game, they both collected white chips and red chips. Each white chip was worth 2 points and each red chip was worth 3 points. At the end of the game, Annie had 14 chips worth 50 points in all. How many chips of each color did she have?

3A-11

When Sue planted them, the oak tree was three times as high as the maple tree. Both trees grew about one foot a year. Now the oak tree is 13 feet high and the maple tree is 9 feet high. How high were the trees when Sue planted them?

3A-10

Two koalas were born this month at the zoo. Kippy is 27 days old and Katy is 3 days old. Soon Kippy will be four times as old as Katy. How old will Kippy be then?

3A-9

Ivan stopped, but George kept running for 11 more laps. By the end of the run-a-thon, Ivan and George had run 45 laps around the school playground altogether. How many laps had each boy run?

3A-8

Make a row of 30 flowers. The first flower and every other one after that one are red. The rest of the flowers are yellow. What color is the 12th flower? What color is the 27th flower? What color are the odd numbers? What color are the even numbers?

3A-7

The brown hen laid 12 eggs. Seven of them have hatched. The red hen laid 13 eggs. Four of them have hatched. How many chicks in all? How many eggs are left?

3A-6)

Joan has read six books. Karen has read one more book than Joan has read. Henry has read two fewer books than Joan has read. Don has read twice as many books as Henry has read. Donna has read five fewer books than Don has read. Who has read the most books? Who has read the fewest books?

3A-5

Mice weigh one pound. Cats weigh ten pounds. Cats and mice are playing on the seesaw. On one side are fifteen mice and two cats. On the other side are three cats and four mice. Draw the seesaw as it would look that way. Explain two ways to make the seesaw balance.

3A-4

Carla has six red blocks and four blue blocks. Don has two fewer red blocks and one more blue block than Carla has. Pat has one more red block and three fewer blue blocks than Don has. How many red blocks in all? How many blue blocks in all? Who has the most red blocks? Who has the fewest blue blocks?

3A-3

Mice weigh one pound. Cats weigh ten pounds. Dogs weigh one hundred pounds. The animals are playing on the see saw. On one side are four dogs, two cats, and one mouse. On the other side are two dogs, eight cats, and seven mice. Draw the see-saw with the animals on each side. What can the animals do to make the seesaw balance?

3A-2

We have 24 students divided into 6 equal groups. They are sitting at tables painting. Each table has one yellow paint jar, twice as many red jars, and twice as many blue jars as red ones. How many students are in each group? ____ How many blue jars are on each table? ____ How many red jars in all? ____ How many paint jars in all? ____

3A-1

We have 40 pencils to be divided equally among Bob, Darin, Carl, George, and Meg. How many pencils will each get? Write a sentence that tells what you had to do to get the answer.

Third Grade Probability/Statistics

3P-12

Place each number below in one of the blanks to create the most meaningful and realistic story possible.

1050	150	200	180	462	108	100
------	-----	-----	-----	-----	-----	-----

This week a bookstore sold a total of _____ books, _____ an aver-

age of books each day. The high sales day of _____ was twice the amount of the low sales day of _____. On the second lowest day, _____ books were sold, while _____ were sold on the second highest sales day. The books sold on the other days added up to _____.

3P-11

How many different 4-letter license plates can be made using only the letters M,A,T and H? All four letters must be used on each plate.

3P-10

As a prize, a contest winner is to draw one bill at a time from a box containing ten \$5 bills, ten \$10 bills, and ten \$20 bills. The drawing ends when 3 bills of the same denomination are drawn. What is the largest sum of money that can be won under these conditions?

3P-9

There are 4 boys and 5 girls standing outside of the new record shop. The sign in the window offers a prize to every couple (1 boy and 1 girl) that enters the store. How many prizes can the 9 people get?

3P-8

The people of Domino City use dominoes to show their house numbers. Each domino has two sets of dots on it, like 4 dots with 2 dots, or 2 dots with 4 dots, or 2 dots with 2 dots. Different sets of dots are used on each street. The people who live on Peach Street use dots made with sets of 2 dots, 4 dots, 5 dots or 6 dots to make their house numbers. What are all the different house numbers that the people on Peach Street can make?

3P-7

Jerry's Sub Shop makes the best submarine sandwiches in town. Look at the lists of good things Jerry puts on his sandwiches: meats -- steak, ham or baloney; cheeses -- Swiss or American; and spreads -- mustard or mayonnaise. You ask Jerry to make a sandwich with one kind of meat, one kind of cheese, and one kind of spread on it. What are all the different sandwiches Jerry could make for you?

3P-6

Dan wins points by tossing rings at a number board. There are four numbers on the board: 1, 4, 5, and 7. Dan gets to toss two rings on each round, and he never misses! He hits a number every time he tosses a ring. What are all the different ways Dan could score points in each round? For example: round 1 (first ring - 1, second ring 1); round 1 (first ring 1, second ring 4)...

3P-5

The workers in the Bumblebee Balloon Factory make many different kinds of balloons. Each balloon is round or shaped like a heart, and is red, orange, or yellow. Before the balloon leaves the factory, a worker paints a picture of a happy face or a bumblebee on it. What are all the different kinds of balloons that are made in the Bumblebee Balloon Factory?

3P-4

Aunt Andrea is shopping for a T-shirt for Diana. She is having a hard time making up her mind what T-shirt to buy. She can get long-sleeve or short-sleeve T-shirts, in pink or blue or green. Each T-shirt comes with a picture of a whale on it or a picture of a dinosaur. What are all the different T-shirts Aunt Andrea could buy for Diana?

3P-3

Every Monday, Wednesday, and Friday morning, Aunt Samantha makes one cheese sandwich, one jelly sandwich, and one tuna sandwich. Sally, Sheryl, and Sue each take one of the sandwiches for lunch. The girls do not like to eat the same kind of sandwich more than once a week, so Aunt Samantha makes a chart to remind her who took which sandwich. What might Aunt Sam's chart look like?

3P-2

We went on a bird walk. We counted 25 robins, 32 blue jays, 19 cardinals, 4 eagles, 2 hummingbirds, and 1 owl. Make a chart that shows this. How many more cardinals are there than owls?

___ How many more robins are there than hummingbirds? ___ How many fewer eagles are there than blue jays? ___

3P-1

Lynn has 54 cards. Olive has 28 cards. Gabor has 61 cards. Rachel has 73 cards.

Make a graph as accurately as you can.

How many more cards does Rachel have than Lynn have? ___

Third Grade Logic Problems

3L-6

Tom, Dick and Harry work in a bank. One is the manager, one is the cashier, and one is the teller. The teller, who was an only child, earns the least. Harry, who married Tom's sister, earns more than the manager. What position does each person fill?

3L-5

Use eight pennies for this game with a friend. At your turn, you must pick up 1, 2 or 3 pennies. Then your friend must do the same. Whoever picks up the last penny loses. Can you work out a plan so that if you go first you can always win?

3L-4

The number of amoebas in a jar doubles every minute. The jar is full of amoebas in one hour. At what time was the jar half full?

3L-3

Six animals live in the Noisy Apartments on Zoo Street. The apartment building has two floors, and there's a tree to the right of the building. Ella Elephant lives in the apartment next to the tree. Martha Monkey lives above Ella. Larry Llama lives between Martha Monkey and Gerry Giraffe. Sophie Seal lives next to Ella. Taffi Tiger lives to the left of Ella and Sophie. Where does each animal live in the apartment building?

3L-2

Four third-graders brought their favorite things to School. They brought a seashell, a talking bird, a spider and a model of a horse. Tina wants to tell about horses. Allen is showing what he found on a beach. Dale wants his friends to hear his pet say words. Alice wants to show how webs are made. Which third-graders brought each special thing to School?

3L-1

Stella Spider is very tired! She has been climbing up the wall of a shower room all day. She started on the floor early this morning. Stella climbed up 7 tiles. Whoosh! Someone turned the shower on. Stella slid down 4 tiles. When the water was turned off, Stella began to climb again. She climbed up 10 tiles. Whoosh! On went the shower and Stella slid down 6 tiles. When she dried out, Stella began to climb again. She went up 13 tiles. At last she was at the top of the shower. How many tiles high was the top of the shower?

Problems to Teach Strategies for 3rd Gr.

Guess-check- revise

3S-8c

Zoobee has two kinds of flowers in his garden: dandelions and tiger lilies. Zoobee planted only tiger lilies, but dandelions came up too. There are 51 flowers in Zoobee's garden, and there are 15 more dandelions than tiger lilies. How many of the flowers are tiger lilies and how many are dandelions?

3S-8b

"Let's buy this frog mask," croaked Danny to Celia. The frogs both took out their money. Together they paid 37 cents for the mask. Celia paid 15 cents more than Danny did. How much money did each frog pay?

3S-88a

I am thinking of a number. Add the number to itself. Then subtract 13. The answer is 37. What is the number?

3S-7d - Strategy: Draw a picture

The kitten climbed its first tree and got stuck on the top branch. First it went up the trunk of the tree and on up to the 6th branch. A big squirrel scared the kitten and it climbed down 3 branches. A bird flew at the kitten and scared it again. Now it climbed up 10 branches. The kitten climbed back down 2 branches and then went up 4 branches to the very top of the tree. How many branches were in the tree?

3S-7c

Jim is looking for friends to play softball. His friends all live on his side of the street. First he goes down the hill 4 houses to get Lenny. Lenny lives in the first house on the block. Then Jim goes up the hill 6 houses to get Raul. From here he goes down the hill 3 houses to find Terry. Next he goes up the hill 13 houses to get Renata. She lives in the last house on the block. How many houses are on Jim's side of the street in his block?

3S-7b

Juanita and Cole discovered a note in a bottle. It said, "Start at the Boat Dock on Toad Road. Go forward 3 blocks on Toad Road to Snake Street. Turn left and go forward 5 blocks to Snail Trail. Turn right and go forward 4 blocks to Mud Street. Stay there. Use your eyes. Look for a secret message under a big white rock." Can you show the path from the Boat Dock to the secret message?

3S-7a

Harvey started drawing a map for Sue, who wants to get to Al's house. Harvey said, "Here we are at the corner of Story Road and Long Street. Go forward 3 blocks on Long Street. Turn right on Bay Road and go forward 3 blocks. Turn left on Dry Street. Go forward 4 blocks to Lamb Road. Al's house is on the corner of Lamb Road and Dry Street." Can you show Sue's path to Al's house?

3S-6b) Strategy: Act out the problem

Marcy is making a big banner to hang on a wall. She has 3 red, 3 white stars, and 3 blue stars to put on the banner. She is going to put the stars in 3 rows and 3 columns. How can she place the stars so that she has a red star, a blue star, and a white star in each row and in each column?

3S-6a

Donna was putting six new bears in the display case at the toy store. The case had three shelves, one on top of the other, with two spaces on each shelf. Each bear had a name: Abby, Bobby, Cathy, Dorothy, Eric, and Forrest. Donna put Dorothy next to Eric and above Forrest. She did not put Bobby next to Eric or Forrest. She did not put Abby next to Bobby. Where did Donna put each of the bears?

3S-5i) Strategy: Make a table, chart

A snail and a turtle both started out on Monday toward a pond 32 inches away. An owl was watching them and told us how far they were at the beginning of each day of the race. By Tuesday both the snail and the turtle had traveled 1 inch. By Wednesday the snail had traveled 2 inches and the turtle had crawled 7 inches. By Thursday the snail was 4 inches from the start, and the turtle was 13 inches from it. By Friday the snail was 8 inches from the start, and the turtle was 19 inches from it. If the snail and the turtle kept moving in the same ways, which one reached the pond first?

3S-5h

Anthony came home from school with a puzzle for his sister Teresa. He gave her three cards. One card had a 2 on it; one card had a 4 on it; and one card had an 8 on it. Anthony asked, "Teresa, how many 2-digit numbers can you make with these three cards?" Teresa surprised Anthony. She made six different 2-digit numbers. What numbers did Teresa make?

3S-5g

Laura is buying a sundae at Mario's Ice Cream Store. She wants one scoop of ice cream, one kind of sauce, and one kind of topping. Here are the flavors of ice cream and kinds of sauces and toppings Laura can choose from.
Ice Cream: peanut butter, chocolate
Sauces: caramel, chocolate, strawberry
Toppings: nuts, coconut. What are all the different sundaes that Laura could order?

3S-5f

The Chin family is planning a summer vacation. They are trying to decide whether to travel by plane, train, or car. They will go to Yosemite National Park, Yellowstone National Park, or the Grand different trips that the Chins could plan?

-

3S-5e

Angelina's club is having a meeting. They have decided that everyone should have a secret number. They will use just the numerals 1, 3, and 5 in their numbers, but each number will be different. Each numeral can be used only once in any number. If they use all the different three-digit numbers that you can make with the numerals 1, 3, and 5, how many members does Angelina's club have?

3S-5d

The Cars For Kings Company is putting out the new models. They want to put a 4-digit number on the back of each new model car. They have decided to use only the numerals 2, 5, 7, and 8. Each numeral can only be used once in a number. How many different numbers can the Cars For Kings Company put on the backs of the new model cars?

3S-5c

Carla and Nick were playing a factors game. Carla would name a factor of 24 and Nick had to give the other factor. Show the ways Carla and Nick could play the game.

3S-5b

You have the three letters A,E, and T. List all the 3-letter combinations you can make using each letter once. How many of the combinations are actually words?

3S-5a

At camp these are the choices for supper:
a) Meat: steak, trout b) Potatoes: mashed, baked, french fries c) Vegetable: corn, green beans. List the 12 different suppers a camper could choose.

3S-4d

On her first day of vacation, Angela found 2 sand dollars on the beach. She put them in an old sock. The next day she found 4 sand dollars, and she put them in her sock. On each day of her vacation, Angela found 2 more sand dollars than she had found the day before. On what day did she have 42 sand dollars in the sock?

3S-4c- Strategy: Look for a pattern

There were 30 campers in Crazy Creek Park on Saturday when it started to rain. In the first hour of rain, 3 campers took down their tents and went away. In the second hour, 6 campers took down their tents and left the park. The rain kept pouring down. Every hour 3 more campers left than during the hour before. In what hour did the last campers leave the park?

3S-4b

Mona is wearing her magic cape again. The first time she wore it, she found 5 pennies in a crack of the sidewalk. The next time she wore it, she discovered 9 pennies under an old barrel. The third time she wore it, she found 13 pennies in some sand. The fourth time she wore it, she discovered 17 pennies under the bleachers in a ball park. If Mona keeps finding pennies in this way, how many will she find when she wears her cape the eighth time?

3S-4a

Write the next three numbers in each sequence:

a) 2,3,6,__,__,__

b) 1,4,7,10,__,__,__

c) 1,2,4,8,16,__,__,__

d) \cup 1,2,4,7,11,16,__,__,__

3S-3a Strategy: Use logical reasoning

One crab and one shark cost the same as 4 crabs. If one crab costs \$6, then how much does one shark cost?

3S-2c Strategy: Work backward

Porcupines, skunks, and opossums live in Woolly Woods. There are 5 fewer opossums than skunks, and half as many skunks as porcupines. When danger is near, the opossums lie down and play dead. The 16 porcupines raise their quills to frighten away their enemies. How many opossums live in Woolly Woods?

3S-2b

The Jolly Giant weighed some of the vegetables that grew in his garden. He weighed a tomato, an ear of corn, a turnip, and a carrot. The carrot was 8 pounds less than the turnip, and the turnip was 3 pounds more than the ear of corn. The ear of corn weighed half as much as the tomato. The Jolly Giant rolled the tomato onto the scale. It was 18 pounds! How much did the carrot weigh?

3S-2a

Someone broke a bag of peanuts on Peep Street. Pigeons came from all over the city to feast on the peanuts. They ate lots of the nuts on Monday. They ate 2 fewer nuts on Tuesday than on Monday. They came back again on Wednesday, Thursday, and Friday. Each day they ate 2 fewer peanuts than the day before. On Friday they cleaned up the last 4 peanuts. How many peanuts in all did the pigeons eat?

3S-1a - Strategy: Make it Simpler

Mr. and Mrs. Jeremy Mouse sell square tins of cheese buns in their shop. Right now they have 12 tins of buns in the shop. They stack the tins on the shelf, 2 tins in each stack, and the stacks touch sides. Every day Mr. Mouse dusts the sides of the tins that are not touching the shelf or another tin. How many sides must he dust on 12 tins of buns?

Congratulations!

You have finished your math packet!

