



Collection of **50** Problem Solving Tasks

To help meet the 4th Grade Common Core
"Standards for Mathematical Practice"

Draw a Picture
Use an Organized List

Create a Table
Find a Pattern

Guess and Check
Write an Equation

Name: _____ Date: _____ Score: _____

Problem Solving Task #1

Task:

Molly and Polly practice gymnastics at the same gym. Molly goes to the gym every three days and Polly goes every four days. In 4 weeks, how many times will Molly and Polly be at the gym on the same day?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #2

Task:

Kaitlin and Kristy are sisters. Kaitlin is 2 years old and Kristy is 7 years old. In how many years will Kristy be twice Kaitlin's age?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #3

Task:

Rosie and Rachel went to the party shop to pick out souvenirs for their party. Rosie bought party hats at \$0.34 a piece. Rachel bought balloons at \$0.18 a piece. If they bought the same amount of each item and spent a total of \$3.64 , how many balloons and party hats did they get?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #4

Task:

Bobby bought a bag of candy at the candy shop. His total came to \$0.68. He gave the cashier 9 coins. How many of each coin did Bobby give the cashier?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #5

Task:

Chris and Steve were partners for their science project. It took a total of 4 hours for the project to be completed. Chris worked on the project twice as long as Steve. How long did each of them spend on the project?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #6

Task:

Pablo and Lizzy reached the end of their scavenger hunt. They then realized that they needed a secret code to open the treasure box. They were given the following clues:

- The secret code is greater than 50.
- The secret code is less than 90.
- The secret code is a multiple of 8.
- The secret code is also a multiple of 12.

What is the secret code that Pablo and Lizzy need to open the treasure box?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #7

Task:

On a road trip to visit their cousins, Carly and Kyle decided to count the number of red, blue, and yellow cars that they saw. In the first hour, they counted twice as many red cars as blue cars. The number of yellow cars they counted was one third of the number of red cars. If they counted a total of 33 cars, how many of each car did they count?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #8

Task:

When Jake's grandfather visited, he gave Jake all the pennies, nickels, and dimes that he had in his pockets. If he gave Jake a total of 12 coins equaling \$0.59, how many of each type of coin did Jake get?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #9

Task:

Mrs. Latham was making lunches for a picnic. Each of her children could choose one sandwich, one snack, and one drink. The sandwiches they could choose from were turkey, egg salad, and peanut butter. Their snack choices were chips, fruit, or crackers. They could also choose between apple juice and milk. How many different combinations did Mrs. Latham's children have to choose from?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #10

Task:

Four friends, Mike, Mary, Mitch, and Michelle all have different pets. They each either have a dog, a cat, a lizard, or a bird. Mitch and Mary are allergic to animals with fur. Mary is afraid of reptiles. Mike likes to play fetch with his pet. Which friends have which pets?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #11

Task:

In Miss Marhsall's class, there are 2 boys for every 3 girls. If Miss Marshall has 25 students in her class, how many are boys and how many are girls?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #12

Task:

The seating options at Benny's Restaurant are 3-legged stools and 4-legged chairs. There are an equal number of stools and chairs. If Benny counts 91 legs altogether, how many total seats are there at his restaurant?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #13

Task:

The Sunland Farm raises ducks and goats. Altogether, the animals on the farm have 15 heads and 48 legs. How many ducks and goats can be found at Sunland Farm?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #14

Task:

At Potter's Cupcake Shop, ordering 8 small cupcakes costs the same as ordering 3 small cupcakes and 2 large cupcakes. If a small cupcake costs \$2, how much does a large cupcake cost?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #15

Task:

Four friends, Tomas, Melanie, Scott, and Laura are comparing the number of books they have read this month. Melanie has read three times as many books as Tomas. Scott and Laura have read the same number of books. Tomas has read 4 books. The total number of books that all of them have read is 32. Tell how many books each friend has read this month.

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #16

Task:

Carlos has forgotten the lock combination for his school locker. He knows that the combination includes the numbers 2, 7, and 9. He just can't remember the order of the numbers. He plans to try all the different combinations of those three numbers. How many different number combinations will he have to try?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #17

Task:

Katie and Kelly started making friendship bracelets for all of their friends at school. On the first day, Katie had made 10 bracelets and Kelly had made 4. Each day after that Katie made 2 more bracelets a day and Kelly made 3 more a day. After how many days of making bracelets did Katie and Kelly have the same number of bracelets made?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #18

Task:

Mrs. Nelson is known in her neighborhood for having many pets. She has birds and cats, and often jokes that between all of her pets, there are 40 eyes and 56 legs. How many cats and birds does Mrs. Nelson have?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #19

Task:

Find two numbers that have a sum of 7,869 and a difference of 1,879.

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #20

Task:

Mitchell and Michael are brothers. Mitchell is 3 years old and Michael is 9 years old. In how many years will Michael be twice Mitchell's age?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #21

Task:

Josh and Alex went to the candy shop. Josh bought lemon drops at \$0.35 a piece. Alex bought chocolate bars at \$0.80 a piece. If they bought the same amount of each candy and spent a total of \$6.90, how many lemon drops and chocolate bars did they get?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #22

Task:

Morgan and Jordan volunteered at their school's Harvest Festival. The two of them worked for a total of $2\frac{1}{2}$ hours. Morgan volunteered twice as long as Jordan. How long did each of them spend volunteering at the Harvest Festival?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #23

Task:

Karen got new clothes for her birthday. She got three new shirts in red, blue, and green. She also got a pair of jeans and a pair of black pants. To top it off, she got new boots and new tennis shoes. With the new clothes she got for her birthday, how many outfit combinations can Karen make?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #24

Task:

Bryce's father works on the top floor of a very tall building. One day Bryce went to visit him at work. On his way up, the elevator made a few stops. First, it stopped on the 6th floor. Then, a woman got in and the elevator went down 2 floors. From there, a man entered the elevator, and it went up 5 floors. Then, a little girl and her mother got on and the elevator went down 3 floors. Finally, Bryce was alone in the elevator, and it went up 6 floors to his dad's office. On what floor is his dad's office?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #25

Task:

Mindy is trying to remember the code to unlock her safe. She knows that the code contains the numbers 4, 5, 8, and 9. However, she can't remember what order the numbers go in. She plans to try all the different combinations. How many different number combinations will Mindy have to try?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #26

Task:

Tom and Tim were outside observing bugs in their backyard. They saw many ants and spiders. One observation that they made was that ants have 6 legs and spiders have 8. They decided to count the total number of legs they saw. If they counted 40 legs in all, how many ants and spiders did they see?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #27

Task:

Find 4 consecutive even numbers, which when added together have a sum of 116.

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #28

Task:

Using pennies, nickels, and dimes, how many different ways can you make 17 cents?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #29

Task:

A window cleaner was called in to clean the windows on the top floor of a very tall building. On his way up, he saw other windows that needed to be cleaned. First, he stopped on the 8th floor to clean some rain spots. Then, he had to go back down 3 floors to clean some smudges that he saw. From there, he went up 7 floors to clear up some cobwebs. Finally, he went up the final 12 floors to the top of the building. How many floors did the building have?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #30

Task:

Marla and Brady needed a mystery code to get to the next level of their video game. They were given the following clues:

- The mystery number is greater than 150.
- The mystery number is less than 175.
- The mystery number is an **odd** number.
- The mystery number is a multiple 13.

What is the mystery number that Marla and Brady need?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #31

Task:

The Astronomy Museum has a new exhibit on the planets in the Solar System. The popularity of the exhibit grows daily. On the first day, 29 people visited the exhibit. On the second day, 38 people visited. On the third day, 47 people visited. How many days will it take for the exhibit to reach its capacity at 110 people?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #32

Task:

At Ivan's Ice Cream Shop, ordering 8 small sundaes costs the same as ordering 4 small small sundaes and 2 large sundaes. If a small sundae costs \$3, how much does a large sundae cost?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #33

Task:

Three friends, Lisa, Carl, and Brian are comparing the number of gold coins they have earned in the Wizard World video game. Brian has earned twice as many gold coins as Carl. Lisa has earned a third of the gold coins that Brian has earned. Altogether, the three friends have earned 66 gold coins. How many gold coins did each friend earn?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #34

Task:

Manny and David were making paper airplanes for all of their friends at school. On the first day, Manny had made 12 paper airplanes and David had made 5. Each day after that Manny made 3 more paper airplanes a day and David made 4 more a day. After how many days of making paper airplanes did Manny and David have the same number made?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #35

Task:

Main Street Bookshop recently received a shipment of 315 copies of the newest wizard book. On the first day of its release, the bookshop sold 9 books. On the second day they sold 21 books. On the third day they sold 33. If this pattern continues, how many days will it take the bookshop to run out of the new book?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #36

Task:

Mr. Clark surveyed his students to find out what their favorite school subjects were. Three times as many kids preferred science as the number of kids who preferred math. One third of the class preferred reading. 2 kids preferred social studies and 15 kids preferred science. How many students does Mr. Clark have in his class?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #37

Task:

Four friends, John, Jenna, Billy, and Bella are going trick-or-treating together on Halloween night. Each of them will have the following Halloween costumes: Pirate, Vampire, Ghost, and Mummy. John and Bella will not be heard saying "Aargh!" or "Boo!" throughout the night. Billy is scared of pirates. Bella does not like the sight of blood. Which friends will be wearing which costumes?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #38

Task:

Conner and Tracy are friends and both swim at the same neighborhood pool. Conner swims at the pool every six days and Tracy goes every four days. In 6 weeks, how many times will Conner and Tracy be at the pool on the same day?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #39

Task:

Lily recently signed up for a new cell phone plan. With the new plan, Lily is charged 12¢ for each text message and 8¢ for every minute she talks on the phone. On the first day, Lily's phone bill came to \$1.60. If the number of text messages equaled the number of minutes she spent on the phone, how many messages and minutes was Lily billed for?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #40

Task:

At Royal Elementary School, there are 3 girls for every 5 boys in 4th grade. If Royal Elementary has 72 fourth graders, how many are girls and how many are boys?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #41

Task:

Four friends, Sam, Logan, Penny, and Deb decided to race around the track at their school, to see which one of them was the fastest. Deb came in 10 seconds behind Logan. Penny came in 8 seconds ahead of Sam. Sam came in 15 seconds behind Deb. Logan finished his lap around the track in 38 seconds. How long did it take each friend to race around the track?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #42

Task:

Becky has 48 stickers in her sticker collection. She would like to share half of her stickers with her two little sisters, Katie and Megan. She wants both of them to have an equal amount. Katie already has 16 stickers and Megan already has 18. How many will she give each sister?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #43

Task:

On a nature walk during the fall, Zack and Zoe decided to count the yellow, orange, and red leaves that they saw. They counted 3 times as many red leaves as yellow leaves. The number of orange leaves that they counted was half the number of red leaves. If they counted a total of 44 leaves, how many of each color did they count?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #44

Task:

Find 4 consecutive odd numbers, which when added together have a sum of 200.

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #45

Task:

Every Friday the students at Oak Creek School wear blue to show school spirit. Every student who wears blue is entered into a raffle. Starting at 8:00 AM, the principal picks 2 raffle tickets for students to earn a prize. Every hour after that, he picks double the number of tickets from the hour before. If this continues until 12:00 PM, how many total raffle tickets are picked each Friday?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #46

Task:

Using pennies, nickels, and dimes, how many different ways can you make 23 cents?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #47

Task:

Lucas surveyed students at his school to find out what their favorite sports were. Twice as many students preferred soccer to baseball. Half of the students preferred football. 5 students preferred baseball and 9 students preferred basketball. How many students did Lucas survey?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #48

Task:

Find two numbers that have a sum of 8,422 and a difference of 3,156.

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #49

Task:

Tiffany's Toyshop received a shipment of 360 Megabot Action Figures. On the first day, the toyshop sold 12 Megabots. On the second day they sold 19 Megabots. After that, they became very popular. On the third day they sold 26. If this pattern continues, how many days will it take the toyshop to run out of the Megabot Action Figures?

Work Space:

Answer:

Explain how you solved this problem...

Name: _____ Date: _____ Score: _____

Problem Solving Task #50

Task:

Margo's mother gave her a bag full of green, purple, and orange marbles. There were three times as many purple marbles as orange marbles. The number of green marbles was half the number of orange marbles. If she has a total of 27 marbles, how many of each color does Margo have?

Work Space:

Answer:

Explain how you solved this problem...

Answer Key – Page 1

Task #1	They will be at the gym on the same day twice in 4 weeks.
Task #2	In three years Kristy will be twice Kaitlin's age.
Task #3	They bought 7 balloons and 7 party hats.
Task #4	1 quarter, 3 dimes, 2 nickels, 3 pennies
Task #5	Steve: 80 minutes (1 hr. 20 min.) Chris: 160 minute (2 hr. 40 min.)
Task #6	The secret code is 48.
Task #7	18 red cars, 6 yellow cars, 9 blue cars.
Task #8	4 pennies, 5 nickels, 3 dimes
Task #9	18 different combinations.
Task #10	Mike: dog Mary: bird Mitch: lizard Michelle: cat
Task #11	Miss Marshall's class has 10 boys and 15 girls.
Task #12	Benny's Restaurant has 26 total seats.
Task #13	6 ducks and 9 goats.
Task #14	A large cupcake costs \$5.
Task #15	Tomas: 4 books, Melanie: 12 books, Scott/Laura: 8 books each
Task #16	Carlos will have to try 6 number combinations.
Task #17	On the 10th day Katie and Kelly had made the same number.
Task #18	Mrs. Nelson has 8 cats and 12 birds.
Task #19	4,874 and 2,995
Task #20	Michael will be twice Mitchell's age in 4 years.
Task #21	6 lemon drops and 6 chocolate bars.
Task #22	Jordan: 50 minutes, Morgan: 100 minutes
Task #23	12 different outfits.
Task #24	Bryce's dad's office is on the 12th floor.
Task #25	24 number combinations.

Answer Key – Page 2

Task #26	Tom and Tim saw 4 ants and 2 spiders.
Task #27	26, 28, 30, 32
Task #28	You can make 17 cents 6 different ways.
Task #29	The building has 24 floors.
Task #30	The mystery number is 169.
Task #31	After 10 days the exhibit will reach its capacity.
Task #32	Large cupcakes cost \$6 each.
Task #33	Lisa: 12 gold coins, Carl: 18 gold coins, Brian: 36 gold coins
Task #34	On the 9th day Manny and David had made the same number.
Task #35	It will take 7 days for the shop to run out of the new book.
Task #36	Mr. Clark has 33 students in his class.
Task #37	John: Vampire Jenna: Pirate Billy: Ghost Bella: Mummy
Task #38	They will be at the pool on the same day 3 times in 6 weeks.
Task #39	8 messages and 8 minutes.
Task #40	27 girls and 45 boys.
Task #41	Sam ⁶³ 48 sec. Logan 38 sec. Penny ⁵⁰ 42 ⁵⁵ sec. Deb ⁴⁸ 48 sec.
Task #42	Becky will give 11 stickers to Megan and 13 stickers to Katie.
Task #43	24 red leaves, 12 orange leaves, 8 yellow leaves.
Task #44	47, 49, 51, 53
Task #45	62 raffle tickets will be picked each Friday
Task #46	You can make 23 cents in 9 different ways.
Task #47	Lucas surveyed 48 students.
Task #48	5,789 and 2,633
Task #49	The Megabots will sell out on the 9th day.
Task #50	Green Marbles: 3 Purple Marbles: 18 Orange Marbles: 6