

**2<sup>nd</sup> Grade**  
**Application Problems**  
**Eureka Math**

**m1:L3**

## **Application Problem**

The teacher has 48 folders. She gives 6 folders to the first table.

How many folders does she have now?

**m1:L4**

## **Application Problem**

Mark had a stick of 9 green linking cubes. His friend gave him 4 yellow linking cubes.

How many linking cubes does Mark have now?

**m1:L5**

## **Application Problem**

Mia counted all the fish in a tank. She counted 38 goldfish and 4 black fish.

How many fish were in the tank?

**m1:L6**

## **Application Problem**

Mary buys 30 stickers. She puts 7 in her friend's backpack.

How many stickers does Mary have left?

**m1:L7**

## **Application Problem**

Ricardo gave 5 tacos to his sister. He started with 13.

How many tacos does Ricardo have left?

**m1:L8**

## **Application Problem**

Emma has 45 pencils. Eight pencils are sharpened.

How many pencils are not sharpened?

**m2:L1**

## **Application Problem**

Vincent counts 30 dimes and 87 pennies in a bowl.

How many more pennies than dimes are in the bowl?



**m2:L2**

## **Application Problem**

With one push, Brian's toy car traveled 40 centimeters across the rug. When pushed across a hardwood floor, it traveled 95 centimeters.

How many more centimeters did the car travel on the hardwood floor than across the rug?

**m2:L3**

## **Application Problem**

Jamie has 65 flashcards. Harry has 8 more cards than Jamie. How many flash cards does Harry have?

**m2:L4**

## **Application Problem**

Caleb has 37 more pennies than Richard. Richard has 40 pennies. Joe has 25 pennies. How many pennies does Caleb have?

**m2:L5**

## **Application Problem**

Ethan has 8 fewer playing cards than Tristan. Tristan has 50 playing cards. How many playing cards does Ethan have?

**m2:L6**

## **Application Problem**

Eve is 7 centimeters shorter than Joey. Joey is 91 centimeters tall. How tall is Eve?

**m2:L7**

## **Application Problem**

Luigi has 9 more books than Mario. Luigi has 52 books. How many books does Mario have?

**m2:L8**

## **Application Problem**

Bill the frog jumped 7 centimeters less than Robin the frog. Bill jumped 55 centimeters. How far did Robin jump?

**m2:L9**

## **Application Problem**

Richard's sunflower is 9 centimeters shorter than Oscar's. Richard's sunflower is 75 centimeters tall. How tall is Oscar's sunflower?



**m3:L2**

## **Application Problem**

Ben and his dad have sold 60 chocolate chip cookies at the school bake sale. If they baked 100 cookies, how many cookies do they still need to sell?

**M3:L3**

## **Application Problem**

Kinnear decided that he would bike 100 miles this year. If he has biked 64 miles so far, how much farther does he have to bike?

**m3:L4**

## **Application Problem**

At his birthday party, Joey got \$100 from each of his two grandmothers, \$40 from his dad, and \$5 from his little sister.

How much money did Joey get for his birthday?

**m3:L5**

## **Application Problem**

Freddy has \$250 in ten-dollar bills.

- a. How many ten-dollar bills does Freddy have?
  
  
  
  
  
  
  
  
  
  
- a. He gave 6 ten-dollar bills to his brother. How many ten-dollar bills does he have left?

**m3:L6**

## **Application Problem**

Timmy the monkey picked 46 bananas from the tree. When he was done, there were 50 bananas left. How many bananas were on the tree at first?

**m3:L7**

## **Application Problem**

Billy found a briefcase full of money.

He counted up 23 ten-dollar bills, 2 hundred-dollar bills, and 4 one-dollar bills. How much money was in the briefcase?

**m3:L8**

## **Application Problem**

Stacey has \$154. She has 14 one-dollar bills. The rest is in ten-dollar bills. How many ten-dollar bills does she have?

**m3:L9**

## **Application Problem**

Sarah earns \$10 each week for weeding the garden. If she saves all of the money, how many weeks will it take her to save up \$150?



# Application Problem

Materials: (S) Problem Set (if unable to project during the Debrief, perhaps have the students do their work on posters rather than 8 ½" x 11" paper)

**T: Read the following story:** Jerry is a second grader. He was playing in the attic and found an old, dusty trunk. When he opened it, he found things that belonged to his grandfather. There was a cool collection of old coins and bills in an album. One bill was worth \$1,000. Wow! Jerry lay down and started daydreaming. He thought about how good it would feel to give as many people as he could a ten-dollar bill. He thought about how he had felt on his birthday last year when he got a card from his uncle with a ten-dollar bill inside.

But even more, he thought about how lucky he felt one snowy, cold day walking to school when he found a ten-dollar bill in the snow. Maybe he could quietly hide the ten-dollar bills so that lots of people could feel as lucky as he did on that cold day! He thought to himself, "I wonder how many ten-dollar bills are equal to a thousand-dollar bill? I wonder how many people I could bring a lucky day to?"

**m3:L11**

## **Application Problem**

Samantha is helping the teacher organize the pencils in her classroom. She finds 41 yellow pencils and 29 blue pencils. She throws away 12 that are too short.

How many pencils are left in all?

**m3:L12**

## **Application Problem**

How many packages of 10 cookies can Collette make using 124 cookies? How many cookies does she need to complete another package of 10?

**m3:L13**

## **Application Problem**

Sarah's mom bought 4 boxes of crackers. Each box had 3 smaller packs of 10 inside. How many crackers were in the 4 boxes?

**m3:L14**

## **Application Problem**

A second grade class has 23 students. What is the total number of fingers of all the students?

**m3:L16**

## **Application Problem**

At recess Diane skipped rope 65 times without stopping. Peter skipped rope 20 times without stopping.

How many more times did Diane skip rope than Peter?

**m3:L17**

## **Application Problem**

Walking on the beach on Tuesday, Darcy collected 35 rocks. The day before, she collected 28.

How many fewer rocks did she collect on Monday than on Tuesday?

**m3:L18**

## **Application Problem**

For an art project, Daniel collected 15 fewer maple leaves than oak leaves. He collected 60 oak leaves. How many maple leaves did he collect?



**m3:L19**

## **Application Problem**

Mr. Palmer's second-grade class is collecting cans for recycling. Adrian collected 362 cans, Jade collected 392 cans, and Isaiah collected 562 cans.

How many more cans did Isaiah collect than Adrian?

Extension: How many fewer cans did Adrian collect than Jade?

**m3:L20**

## **Application Problem**

399 jars of baby food are sitting on the shelf at the market. Some jars fall off and break. 389 jars are still on the shelf.

How many jars broke?

**m3:L21**

## **Application Problem**

Rahim is reading a really exciting book! He's on page 98. If he reads 10 pages every day, on what page will he be in 3 days?

**m4:L1**

## **Application Problem**

In the morning, Jacob found 23 seashells on the beach. In the afternoon, he found 10 more. In the evening, he found 1 more.

How many seashells did Jacob find in all?

If he gives 10 to his brother, how many seashells will Jacob have left?

**m4:L2**

## **Application Problem**

Susan has 57 cents in her piggy bank. If she just put in 30 cents today, how much did she have yesterday?

**m4:L3**

## **Application Problem**

Terrell put 19 stamps in his book on Monday. On Tuesday, he put in 32 stamps.

- a. How many stamps did Terrell put in his book on Monday and Tuesday?
  
  
  
  
  
  
  
  
  
  
- a. If Terrell's book holds 90 stamps, how many more stamps does he need to fill his book?

**m4:L4**

## **Application Problem**

Carlos bought 61 t-shirts. He gave 29 of them to his friends. How many t-shirts does Carlos have left?

**m4:L6**

## **Application Problem**

Mr. Wally's class collects 36 cans for the recycling program. Then, Azniv brings in 8 more cans. How many cans does the class have now?



**m4:L7**

## **Application Problem**

Farmer Andino's chickens laid 47 brown eggs and 39 white eggs. How many eggs did the chickens lay in all?

**m4:L8**

## **Application Problem**

At the school fair, 29 cupcakes were sold, and 19 were left over. How many cupcakes were brought to the fair?

**m4:L9**

## **Application Problem**

Maria spilled a box of paper clips. They landed on her desk and on the floor. 20 of them landed on her desk. Five more fell on the floor than landed on her desk.

How many paper clips did she spill?

**m4:L10**

## **Application Problem**

Moises sold 24 raffle tickets on Monday and 4 fewer tickets on Tuesday. How many tickets did he sell in all on both days?

# Application Problem

Shelby picks 35 oranges. 5 are rotten.

a. How many of Shelby's oranges are not rotten?

a. Rosa picks 35 oranges, too, but 6 are rotten. How many of Rosa's oranges are not rotten?

**m4:L12**

## **Application Problem**

Barb has a bag of 34 cherries. She eats 17 cherries for a snack. How many cherries does she have left?

**M4:L13**

## **Application Problem**

Mrs. Beachy went shopping with \$42. She spent \$18. How much money did she have left?

**m4:L14**

## **Application Problem**

The total length of a red string and a purple string is 73 cm. The red string is 18 cm long. How long is the purple string?

Extension: Find the difference in length between the two strings.



**M4:L15**

## **Application Problem**

There are 136 students in the second grade at Miles Davis Elementary. 27 of them brought bag lunches to school. The rest buy the hot lunch.

How many students are buying a hot lunch?

# Application Problem

Erasers come in boxes of 10. Victor has 14 boxes. Gabby has 5 boxes.

- a. How many erasers does Victor have?
  
  
  
  
  
  
  
  
  
  
- a. How many erasers does Gabby have?
  
  
  
  
  
  
  
  
  
  
- a. If Gabby gets another box, how many erasers do they have in all?

**M4:L18**

## **Application Problem**

Hailey and Gio solve  $56 + 85$ . Gio says the answer is 131. Hailey says the answer is 141.

Explain whose answer is correct using numbers, pictures, or words.

**m4:L19**

## **Application Problem**

There are 35 note cards in one box. There are 67 note cards in another box. How many note cards are there in all?

**m4:L20**

## **Application Problem**

Kendra and Jojo are counting their marbles. Kendra has 38, and Jojo has 62. Kendra says they have 100 marbles altogether, but Jojo says they have 90.

Use words, numbers, or a model to prove who is correct.

**m4:L21**

## **Application Problem**

Katrina has 23 stickers, and Jennifer has 9. How many more stickers does Jennifer need to have as many as Katrina?

**m4:L22**

## **Application Problem**

There are 38 apples, 16 bananas, 24 peaches, and 12 pears in the fruit basket. How many pieces of fruit are in the basket?

**m4:L23**

## **Application Problem**

Yossef downloaded 115 songs. 100 of them were rock songs. The rest were hip-hop songs.

a. How many of Yossef's songs were hip-hop?

a. 80 of his rock songs were oldies rock. How many rock songs were new?



**m4:L24**

## **Application Problem**

Sammy bought 114 notecards. He used 70 of them. How many unused notecards did he have left?

**m4:L25**

## **Application Problem**

114 people went to the fair. 89 of them went in the evening. How many went during the day?

**m4:L26**

## **Application Problem**

Chloe needs 153 beads to make a bag. She only has 49. How many more beads does she need?

**m4:L27**

## **Application Problem**

Mr. Ramos has 139 pencils and 88 erasers. How many more pencils than erasers does he have?

**m4:L28**

## **Application Problem**

Jerry made 200 pizzas. He sold some of them and had 57 pizzas left. How many did he sell?

**m4:L29**

## **Application Problem**

Kathy read 15 fewer pages than Lucy. Lucy read 51 pages. How many pages did Kathy read?

**m4:L30**

## **Application Problem**

Eli spent 87 cents for a notebook and 38 cents for a pencil. How much money did he spend in all?

**m5:L1**

## **Application Problem**

The shelter rescued 27 kittens in June. In July, 11 kittens were rescued. In August, 40 more were rescued.

- a. How many kittens did the shelter rescue during those 3 months?
  
  
  
  
  
  
  
  
  
  
- a. If 64 of those kittens found homes by the end of August, how many still needed homes?



**m5:L2**

## **Application Problem**

Max has 42 marbles in his marble bag after he added 20 marbles at noon. How many marbles did he have before noon?

**m5:L3**

## **Application Problem**

A children's library sold 27 donated books. Now, they have 48. How many books were there to begin with?

**m5:L4**

## **Application Problem**

Diane needs 65 craft sticks to make a gift box. She only has 48. How many more craft sticks does she need?

**m5:L5**

## **Application Problem**

Jenny had 39 collectible cards in her collection. Tammy gave her 36 more. How many collectible cards does Jenny have now?

**m5:L6**

## **Application Problem**

Maria made 60 cupcakes for the school bake sale. She sold 28 cupcakes on the first day. How many cupcakes did she have left?

**m5:L7**

## **Application Problem**

Jeannie got a pedometer to count her steps. The first hour, she walked 43 steps. The next hour, she walked 48 steps.

- a. How many steps did she walk in the first two hours?
  
  
  
  
  
  
  
  
  
  
- a. How many more steps did she walk in the second hour than in the first?

**m5:L8**

## **Application Problem**

Susan has 37 pennies. M. J. has 55 more pennies than Susan.

- a. How many pennies does M. J. have?
  
  
  
  
  
  
  
  
  
  
- a. How many pennies do they have altogether?

**m5:L9**

## Application Problem

The table to the right represents the halftime score at a basketball game.

The red team scored 19 points in the second half.

The yellow team scored 13 points in the second half.

a. Who won the game?

a. By how much did that team win?

Team	Score
red team	63 points
yellow team	71 points



**m5:L10**

## **Application Problem**

Benjie has 36 crayons. Ana has 12 fewer crayons than Benjie.

- a. How many crayons does Ana have?
  
  
  
  
  
  
  
  
  
  
- a. How many crayons do they have altogether?

**m5:L11**

## **Application Problem**

Mr. Arnold has a box of pencils. He passes out 27 pencils and has 45 left. How many pencils did Mr. Arnold have in the beginning?

**m5:L13**

## **Application Problem**

A fruit seller buys a carton of 90 apples. Finding that 18 of them are rotten, he throws them away. He sells 22 of the ones that are left on Monday.

Now, how many apples does he have left to sell?

**m5:L14**

## **Application Problem**

Brienne has 23 fewer pennies than Alonzo. Alonzo has 45 pennies.

a. How many pennies does Brienne have?

a. How many pennies do Alonzo and Brienne have altogether?

**m5:L15**

## **Application Problem**

Catriona earned 16 more stickers than Peter. She earned 35 stickers. How many stickers did Peter earn?

MaryJo earned 47 stickers. How many more does Peter need to have the same amount as MaryJo?

**m5:L16**

## **Application Problem**

Will read 15 more pages than Marcy. Marcy read 38 pages. The book is 82 pages long.

a. How many pages did Will read?

a. How many more pages does Will need to read to finish the book?

**m5:L17**

## **Application Problem**

Colleen put 27 fewer beads on her necklace than Jenny did. Colleen put on 46 beads.

How many beads did Jenny put on her necklace?

If 16 beads fell off of Jenny's necklace, how many beads are still on it?

**m5:L18**

## **Application Problem**

Joseph collected 49 golf balls from the course. He still had 38 fewer than his friend Ethan.

- a. How many golf balls did Ethan have?
  
  
  
  
  
  
  
  
  
  
- a. If Ethan gave Joseph 24 golf balls, who had more golf balls? How many more?



**m6:L1**

## **Application Problem**

Julisa has 12 stuffed animals. She wants to put the same number of animals in each of her 3 baskets.

a. Draw a picture to show how she can put the animals into 3 equal groups.

a. Complete the sentence. Julisa put \_\_\_\_\_ animals in each basket.

**m6:L2****Application Problem**

Mayra sorts her socks by color. She has 4 purple socks, 4 yellow socks, 4 pink socks, and 4 orange socks.

a. Draw groups to show how Mayra sorts her socks.

a. Write a repeated addition equation to match.

a. How many socks does Mayra have in all?

**m6:L3**

## **Application Problem**

Markers come in packs of 2. If Jessie has 6 packs of markers, how many markers does she have in all?

- a. Draw groups to show Jessie's packs of markers.
  
  
  
  
  
  
  
  
  
  
- a. Write a repeated addition equation to match your drawing.
  
  
  
  
  
  
  
  
  
  
- a. Group addends into pairs, and add to find the total.

**m6:L4**

## **Application Problem**

The flowers are blooming in Maria's garden. There are 3 roses, 3 buttercups, 3 sunflowers, 3 daisies, and 3 tulips. How many flowers are there in all?

a. Draw a tape diagram to match the problem.

a. Write a repeated addition equation to solve.

**m6:L5**

## **Application Problem**

Mrs. White is in line at the bank. There are 4 teller windows, and 3 people are standing in line at each window.

a. Draw an array to show the people in line at the bank.

a. Write the total number of people.

**m6:L6**

## **Application Problem**

Sam is organizing her greeting cards. She has 8 red cards and 8 blue cards. She puts the red cards in 2 columns and the blue ones in 2 columns to make an array.

a. Draw a picture of Sam's greeting cards in the array.

a. Write a statement about Sam's array.

**m6:L7**

## **Application Problem**

Bobby puts 3 rows of tile in his kitchen to make a design. He lays 5 tiles in each row.

- a. Draw a picture of Bobby's tiles.
  
  
  
  
  
  
  
  
  
  
- a. Write a repeated addition equation to solve for the total number of tiles Bobby used.

**m6:L8**

## **Application Problem**

Charlie has 16 blocks in his room. He wants to build equal towers with 5 blocks each.

a. Draw a picture of Charlie's towers.

a. How many towers can Charlie make?

a. How many more blocks does Charlie need to make equal towers of 5?



**m6:L10**

## **Application Problem**

Sandy's toy telephone has buttons arranged in 3 columns and 4 rows.

- a. Draw a picture of Sandy's telephone.
  
  
  
  
  
  
  
  
  
  
- a. Write a repeated addition equation to show the total number of buttons on Sandy's telephone.

# Application Problem

Ty bakes two pans of brownies. In the first pan, he cuts 2 rows of 8. In the second pan, he cuts 4 rows of 4.

- a. Draw a picture of Ty's brownie pans.
  
- a. Write a repeated addition equation to show the total number of brownies in each pan.
  
- a. How many brownies did Ty bake altogether? Write an equation and a statement to show your answer.

**m6:L12**

## **Application Problem**

Lulu made a pan of brownies. She cut them into 3 rows and 3 columns.

- a. Draw a picture of Lulu's brownies in the pan.
  
- a. Write a number sentence to show how many brownies Lulu has.
  
- a. Write a statement about Lulu's brownies.

Extension: How should Lulu cut her brownies if she wants to equally serve 12 people? 16 people? 20 people?

## Application Problem

Ellie bakes a square pan of lemon bars, which she cut into nine equal pieces. Her brothers eat 1 row of her treats. Then, her mom eats 1 column.

- a. Draw a picture of Ellie's lemon bars before any are eaten. Write a number sentence to show how to find the total.
- a. Write an X on the bars that her brothers eat. Write a new number sentence to show how many are left.
- a. Draw a line through the bars that her mom eats. Write a new number sentence to show how many are left.
- a. How many bars are left? Write a statement.

**m6:L15**

## **Application Problem**

Rick is filling his muffin pan with batter. He fills 2 columns of 4. One column of 4 is empty.

- a. Draw to show the muffins and the empty column.
  
  
  
  
  
  
  
  
  
  
- a. Write a repeated addition equation to tell how many muffins Rick makes.

**m6:L16**

## **Application Problem**

Rick is baking muffins again. He filled 3 columns of 3 and left one column of 3 empty.

- a. Draw a picture to show what the muffin pan looked like. Shade the columns that Rick filled.
  
  
  
  
  
  
  
  
  
  
- a. Write a repeated addition equation to tell how many muffins Rick makes. Then, write a repeated addition equation to tell how many muffins would fit in the whole pan.

## Application Problem

Seven students sit on one side of a lunch table. Seven more students sit across from them on the other side of the table.

- a. Draw an array to show the students.
- a. Write an addition equation that matches the array.

Three more students sit down on each side of the table.

- a. Draw an array to show how many students there are now.
- a. Write an addition equation that matches the new array.

**m6:L18**

## **Application Problem**

Eggs come in cartons of 12. Use pictures, numbers, or words to explain whether 12 is even or not even.



**m6:L19**

## **Application Problem**

Eggs come in cartons of 12. Joanna's mom used 1 egg. Use pictures, numbers, or words to explain whether the amount left is even or odd.

**m6:L20**

## **Application Problem**

Mrs. Boxer has 11 boys and 9 girls at a Grade 2 party.

- a. Write the equation to show the total number of people.
  
  
  
  
  
  
  
  
  
  
- a. Are the addends even or odd?
  
  
  
  
  
  
  
  
  
  
- a. Mrs. Boxer wants to pair everyone up for a game. Does she have the right number of people for everyone to have a partner?

**m7:L1**

## **Application Problem**

There are 24 penguins sliding on the ice. There are 18 whales splashing in the ocean.

How many more penguins than whales are there?

**m7:L2**

## **Application Problem**

Gemma is counting animals in the park. She counts 16 robins, 19 ducks, and 17 squirrels.

How many more robins and ducks did Gemma count than squirrels?

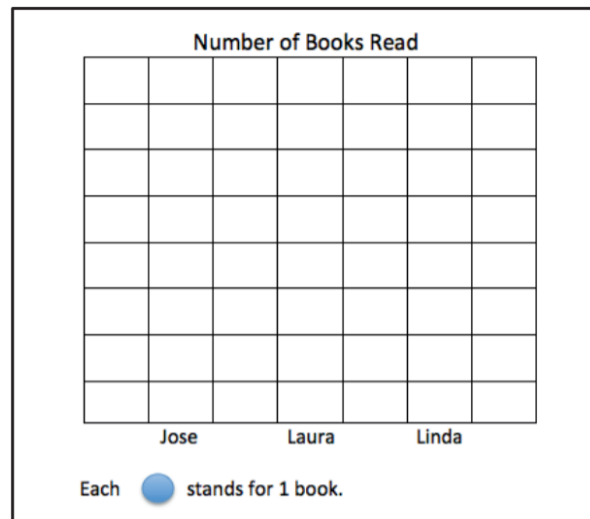
**m7:L3**

# Application Problem

Materials: (T) Tally chart (S) 1 Number of Books Read picture graphs (Template 1) per student

- a. Use the tally chart to fill in the picture graph.

Number of Books Read		
Jose	Laura	Linda



- a. Draw a tape diagram to show how many more books Jose read than Laura.
- a. If Jose, Laura, and Linda read 21 books altogether, how many books did Linda read?
- a. Complete the tally chart and the graph.

**m7:L4**

## Application Problem

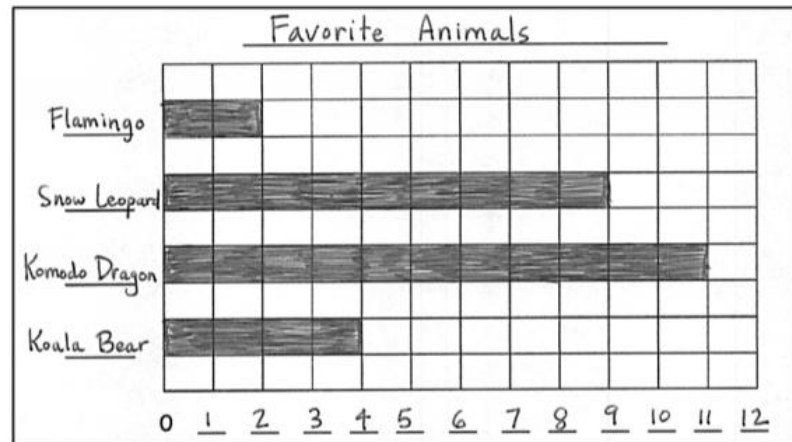
After a trip to the zoo, Ms. Anderson's students voted on their favorite animals. Use the bar graph to answer the following questions.

a. Which animal got the fewest votes?

a. Which animal got the most votes?

a. How many more students liked Komodo dragons than koala bears?

a. Later, two students changed their votes from koala bear to snow leopard. What was the difference between koala bears and snow leopards then?



**m7:L5**

## **Application Problem**

Rita has 19 more pennies than Carlos. Rita has 27 pennies. How many pennies does Carlos have?

**m7:L6**

## **Application Problem**

Sarah is saving money in her piggy bank. So far, she has 3 dimes, 1 quarter, and 8 pennies.

a. How much money does Sarah have?

a. How much more does she need to have a dollar?



**m7:L7**

## **Application Problem**

Danny has 2 dimes, 1 quarter, 3 nickels, and 5 pennies.

- a. What is the total value of Danny's coins?
  
  
  
  
  
  
  
  
  
  
- a. Show two different ways that Danny might add to find the total.

**m7:L8**

## **Application Problem**

Kiko's brother says that he will trade her 2 quarters, 4 dimes, and 2 nickels for a one-dollar bill.

Is this a fair trade?

How do you know?

**m7:L9**

## **Application Problem**

Clark has 3 ten-dollar bills and 6 five-dollar bills. He has 2 more ten-dollar bills and 2 more five-dollar bills than Shannon.

How much money does Shannon have?

**m7:L10**

## **Application Problem**

Andrew, Brett, and Jay each have 1 dollar in change in their pockets. They each have a different combination of coins.

What coins might each boy have in his pocket?

**m7:L11**

## **Application Problem**

Tracy has 85 cents in her change purse. She has 4 coins.

- a. Which coins are they?
  
  
  
  
  
  
  
  
  
  
- a. How much more money will Tracy need if she wants to buy a bouncy ball for \$1?

**m7:L12**

## **Application Problem**

T: We can write 100 cents as \$1 in our number sentence.

Richie has 24 cents. How much more money does he need to make \$1?

**m7:L13**

## **Application Problem**

Dante had some money in a jar. He puts 8 nickels into the jar. Now he has 100 cents. How much money was in the jar at first?

**m7:L14**

## **Application Problem**

Frances is moving the furniture in her bedroom. She wants to move the bookcase to the space between her bed and the wall, but she is not sure it will fit.

Talk with a partner: What could Frances use as a measurement tool if she doesn't have a ruler? How could she use it?

Show your thinking on your personal white board using pictures, numbers, or words.



**m7:L15**

## **Application Problem**

Materials: (S) Small object approximately 6 inches long or less, 9 lima beans, 3 toothpicks per pair

Edwin and Tina have the same toy truck. Edwin says his is 4 toothpicks long. Tina says hers is 12 lima beans long. How can they both be right?

Work with a partner to measure your object. Partner A, measure with lima beans. Partner B, measure with toothpicks. Use words or pictures to explain how Edwin and Tina can both be right.

**m7:L17**

## **Application Problem**

Benjamin measures his forearm and records the length as 15 inches. Then, he measures his upper arm and realizes it's the same!

- a. How long is one of Benjamin's arms?
  
  
  
  
  
  
  
  
  
  
- a. What is the total length of both of Benjamin's arms together?

**m7:L18**

## **Application Problem**

Ezra is measuring things in his bedroom. He thinks his bed is about 2 yards long. Is this a reasonable estimate? Explain your answer using pictures, words, or numbers.

**m7:L19**

## **Application Problem**

Katia is hanging decorative lights. The strand of lights is 46 feet long. The building wall is 84 feet long.

How many more feet of lights does Katia need to buy to equal the length of the wall?

**m7:L21**

## **Application Problem**

To ride the Mega Mountain roller coaster, riders must be at least 44 inches tall. Caroline is 57 inches tall. She is 18 inches taller than Addison.

How tall is Addison?

How many more inches must Addison grow to ride the roller coaster?

**m7:L22**

## **Application Problem**

Liza, Cecilia, and Dylan are playing soccer. Liza and Cecilia are 120 feet apart. Dylan is in between them. If Dylan is standing the same distance from both girls, how many feet is Dylan from Liza?

**m7:L24**

## **Application Problem**

Mike, Dennis, and April all collected coins from a parking lot. When they counted their coins, they had 24 pennies, 15 nickels, 7 dimes, and 2 quarters. They put all the pennies into one cup and the other coins in another.

Which cup has more coins? How many more?

**m7:L25**

## Application Problem

These are the types and numbers of stamps in Shannon's stamp collection.

Type of Stamp	Number of Stamps
Holiday	16
Animal	8
Birthday	9
Famous singers	21

Her friend Michael gives her some flag stamps. If he gives her 7 fewer flag stamps than birthday and animal stamps together, how many flag stamps does she have?

Extension: If the flag stamps are worth 12 cents each, what is the total value of Shannon's flag stamps?



**m7:L26**

## **Application Problem**

Judy bought an MP3 player and a set of earphones. The earphones cost \$9, which is \$48 less than the MP3 player.

How much change should Judy get back if she gave the cashier a \$100 bill?

**m8:L1**

## **Application Problem**

Materials: (S) 12 toothpicks

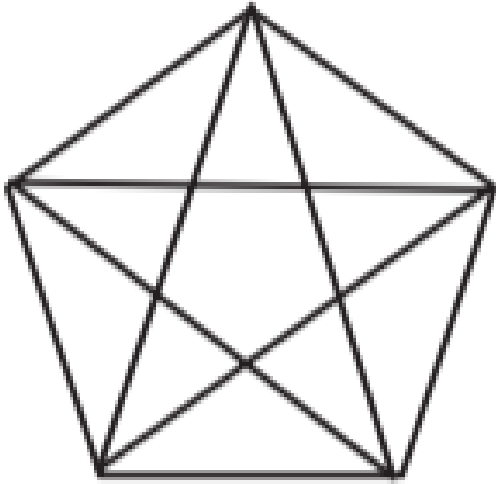
Terrence is making shapes with 12 toothpicks. Using all of the toothpicks, create 3 different shapes he could make. How many other combinations can you find?

**m8:L2**

## **Application Problem**

Materials: (S) Find the triangles (Application Template)

How many triangles can you find? (Hint: If you only found 10, keep looking!)



**m8:L3**

## **Application Problem**

Three sides of a quadrilateral have the following lengths: 19 cm, 23 cm, and 26 cm. If the total distance around the shape is 86 cm, what is the length of the fourth side?

**m8:L5**

## **Application Problem**

Owen had 90 straws to create pentagons. He created a set of 5 pentagons when he noticed a number pattern. (Draw on the board, as shown below.)

How many more shapes can he add to the pattern?

**m8:L6**

## **Application Problem**

Frank has 19 fewer cubes than Josie. Frank has 56 cubes. They want to use all of their cubes to build a tower. How many cubes will they use?

**m8:L7**

## **Application Problem**

Mrs. Libarian's students are picking up tangram pieces. They collect 13 parallelograms, 24 large triangles, 24 small triangles, and 13 medium triangles. The rest are squares.

If they collect 97 pieces in all, how many squares are there?

**m8:L8**

## **Application Problem**

Students were making larger shapes out of triangles and squares. They put away all 72 triangles. There were still 48 squares on the carpet.

How many triangles and squares were on the carpet when they started?



**m8:L9**

## **Application Problem**

Mr. Thompson's class raised 96 dollars for a field trip. They need to raise a total of 120 dollars.

a. How much more money do they need to raise in order to reach their goal?

a. If they raise 86 more dollars, how much extra money will they have?

**m8:L10**

## **Application Problem**

Felix is passing out raffle tickets. He passes out 98 tickets and has 57 left. How many raffle tickets did he have to start?

**m8:L11**

## **Application Problem**

Jacob collected 70 baseball cards. He gave half of them to his brother, Sammy. How many baseball cards does Jacob have left?

**m8:L12**

## **Application Problem**

Tugu made two pizzas for himself and his 5 friends to share. He wants everyone to have an equal share of the pizza.

Should he cut the pizzas into halves, thirds, or fourths?

**m8:L14**

## **Application Problem**

Brownies take 45 minutes to bake. Pizza takes half an hour less than brownies to warm up. How long does pizza take to warm up?

**m8:L15**

## **Application Problem**

At Memorial School, students have a quarter hour for morning recess and 33 minutes for a lunch break.

How much free time do they have in all?

How much more time for lunch than recess do they have?

**m8:L16**

## **Application Problem**

On Saturdays, Jean may only watch cartoons for one hour. Her first cartoon lasts 14 minutes, and the second lasts 28 minutes. After a 5-minute break, Jean watches a 15-minute cartoon. How much time does Jean spend watching cartoons? Did she break her time limit?