

# PROBLEM SOLVING



\_\_\_\_\_  
NAME:

# I ♥ Math



## MATH PROBLEMS

Peter went bowling and got the following points. What will his his final score be if the pattern continues?

1	2	3	4	5	6	7	8	9	10	Total
5	10	15	20		25	20	15	10	5	



**Problem 1**

      
2

Peter's final score was \_\_\_\_\_.

Between them, Aliyah and Teren scored goals in each of the games they played. How many goals did they get in the season if the pattern continued to the final game?

1	2	3	4	5	6	7	8	9	10	Total
3	2	1	1	2	3	3	2	1		



**Problem 2**

      
2

Between them, Aliyah and Teren got \_\_\_\_\_ goals in the season.

Alina had a job babysitting. Her pay schedule for each day is below. How much would she make in total if the pattern continued?

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Total
\$9	\$18	\$27	\$36	\$45	\$54	\$63	\$72			



**Problem 3**

      
3

Alina would make a total of \$\_\_\_\_\_.

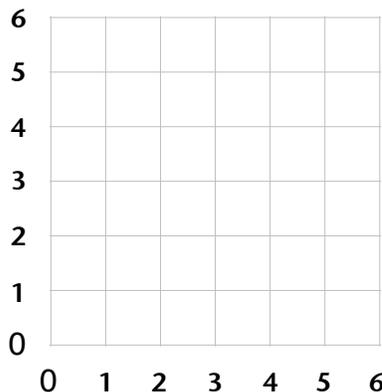
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## MATH PROBLEMS

Elyse plotted the following points and connected the dots in order. What shape did she make?

- a. (1, 4)
- b. (4, 4)
- c. (4, 5)
- d. (6, 3)
- e. (4, 1)
- f. (4, 2)
- g. (1, 2)
- h. (1, 4)



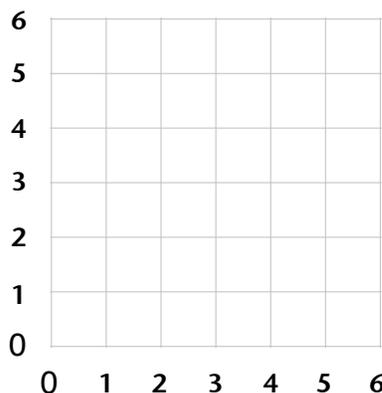
**Problem 4**

      
**9**

Maddie made a \_\_\_\_\_ shape.

Kenadie plotted the following points and connected the dots in order. What shape did she make?

- a. (3, 5)
- b. (4.5, 4.5)
- c. (5, 3)
- d. (4.5, 1.5)
- e. (3, 1)
- f. (1.5, 1.5)
- g. (1, 3)
- h. (1.5, 4.5)
- i. (3, 5)



**Problem 5**

      
**10**

Daniella made a \_\_\_\_\_ sign.

If Abby could figure out the rule that created the following input and output numbers, she would win a trip around the world for the grade sixes. What answer should she give?

INPUT	RULE	OUTPUT
6		4
7		4
8		4
9		4



**Problem 6**

      
**1**

Trinity should say the rule is \_\_\_\_\_.

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## MATH PROBLEMS

The pet store has 8 rabbits for sale. Each morning, Charity, the owner, feeds the rabbits a total of 2 cups of pellets. If each rabbit receives the same amount of pellets, how much does each rabbit receive?



**Problem 7**

Each rabbit receives \_\_\_\_\_ cup of pellets.

      
2

Each rabbit at Charity's pet store is sold for \$20.00. How much money will Charity make if she sells 7 of them?

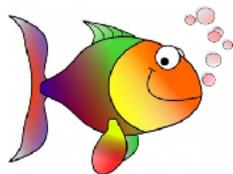


**Problem 8**

Charity will make \_\_\_\_\_ dollars.

      
5

On Monday, there were 99 fish in the fish tank. On Tuesday, 7 fish were sold. On Wednesday, 3 fish were sold. On Thursday, 5 fish were added to the tank. On Friday, 3 fish were sold. How many fish were in the tank at the end of the week?



**Problem 9**

There were \_\_\_\_\_ fish in the tank.

      
5



**MATH PROBLEMS**

Charity's employee, Isaac, counts the fish in each of the fish tanks and finds the following totals: 75, 119, 92, 32, and 84. What is the total number of fish?



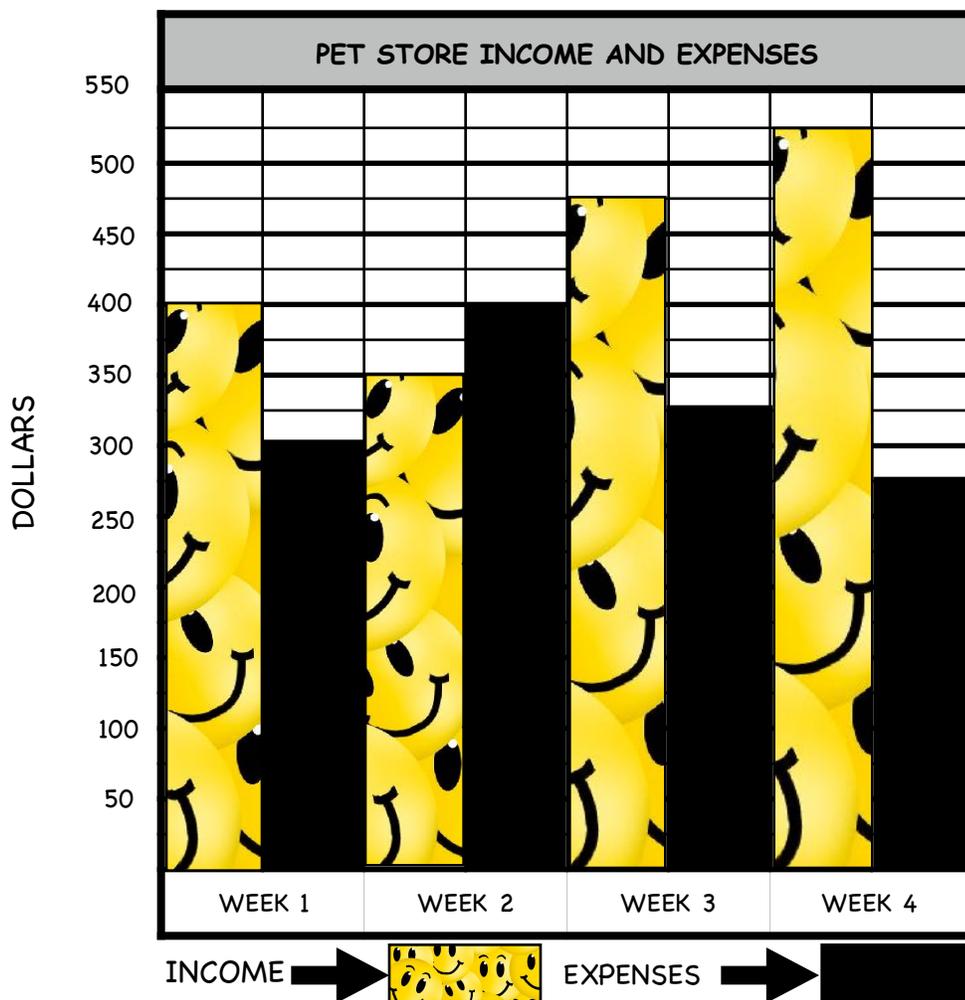
**Problem 10**

The total number of fish in the tanks is \_\_\_\_\_.

      
2

The graph below shows the income and expenses for four weeks at the pet store. What is the net profit for the four weeks?

Hint: Net Profit is calculated by subtracting the expenses from the income.



**Problem 11**

The net profit for the four weeks was \_\_\_\_\_ dollars.

      
6

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## MATH PROBLEMS

The tickets for the Jets sold for \$85.00. Cole went to the event with four of his friends. How much money did it cost the group to go?



**Problem 12**

It cost the group \_\_\_\_\_ dollars to go.

—  
4

There were three Jet home games. The first game had 14 953 people in attendance. The second game had 13 989 people in attendance. The third game had 15 005 people in attendance. What was the average number of people at the three games?

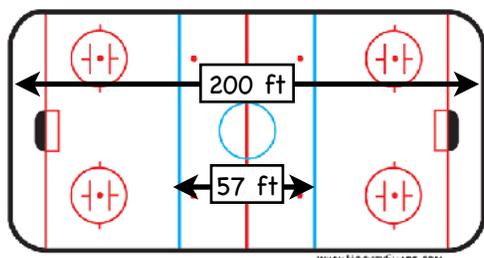


**Problem 13**

The average attendance at the three games was \_\_\_\_\_ people.

—  
4

The length of a rink is 200 feet. If the distance between the blue lines is 57 feet, how far is it from the end boards to the blue line?



**Problem 14**

The distance from the end boards to the blue line is \_\_\_\_\_ ft.

—  
3



**MATH PROBLEMS**

During intermission, Cole bought a drink for \$2.49. If he paid with a five dollar bill, how much money did he get back?



**Problem 15**  


---

**2**

Cole got \$\_\_\_\_\_ back.

Use the clues to determine what number seat each of the five students sat in for the game.

📌 Use the chart below to help you.

Clues:

- 📌 The seats were numbered consecutively, starting with 10 and ending with seat 14.
- 📌 Cole and Kevin sat in odd-numbered seats.
- 📌 Sam's seat number is three more than Cole's seat number.
- 📌 Miles' seat number is two less than Anders' seat number.

WHO SAT WHERE?					
	10	11	12	13	14
Cole					
Kevin					
Sam					
Miles					
Anders					

- Cole sat in seat number \_\_\_\_\_.
- Kevin sat in seat number \_\_\_\_\_.
- Sam sat in seat number \_\_\_\_\_.
- Miles sat in seat number \_\_\_\_\_.
- Anders sat in seat number \_\_\_\_\_.

**Problem 16**  


---

**5**

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## MATH PROBLEMS

There were 18 students on the school bus before Rhianna's stop. Ten students and Rhianna got on the bus at her stop. The bus went to the Collegiate and 7 students got off and 4 more got on. Then the bus went to the Elementary where all the remaining students got off. How many students got off at the Elementary?



**Problem 17**

\_\_\_\_\_

5

\_\_\_\_\_ students got off at the elementary.

Sharise left her house at 7:00 am. It took her 5 minutes 45 seconds to walk to the bus stop. She waited  $3\frac{3}{4}$  minutes for the bus and then rode the bus  $20\frac{1}{2}$  minutes to her school. It took her 15 seconds to get from the bus to the front doors. At what time did she walk into the school?



**Problem 18**

\_\_\_\_\_

5

Shares walked into the school at \_\_\_\_\_ am.

An annual pass for the city bus costs \$26. Rachel and her three friends each bought an annual pass. How much money did they pay in all for the passes?



**Problem 19**

\_\_\_\_\_

4

They paid \_\_\_\_\_ dollars in all for the passes.



**MATH PROBLEMS**

There are 200 buses in the city's bus fleet.  $\frac{1}{10}$  of the buses are reserved for special trips. Of the remaining ones, half start their routes at 5:30 am and the other half start their routes at 6:00 am. How many buses start at 5:30 am?



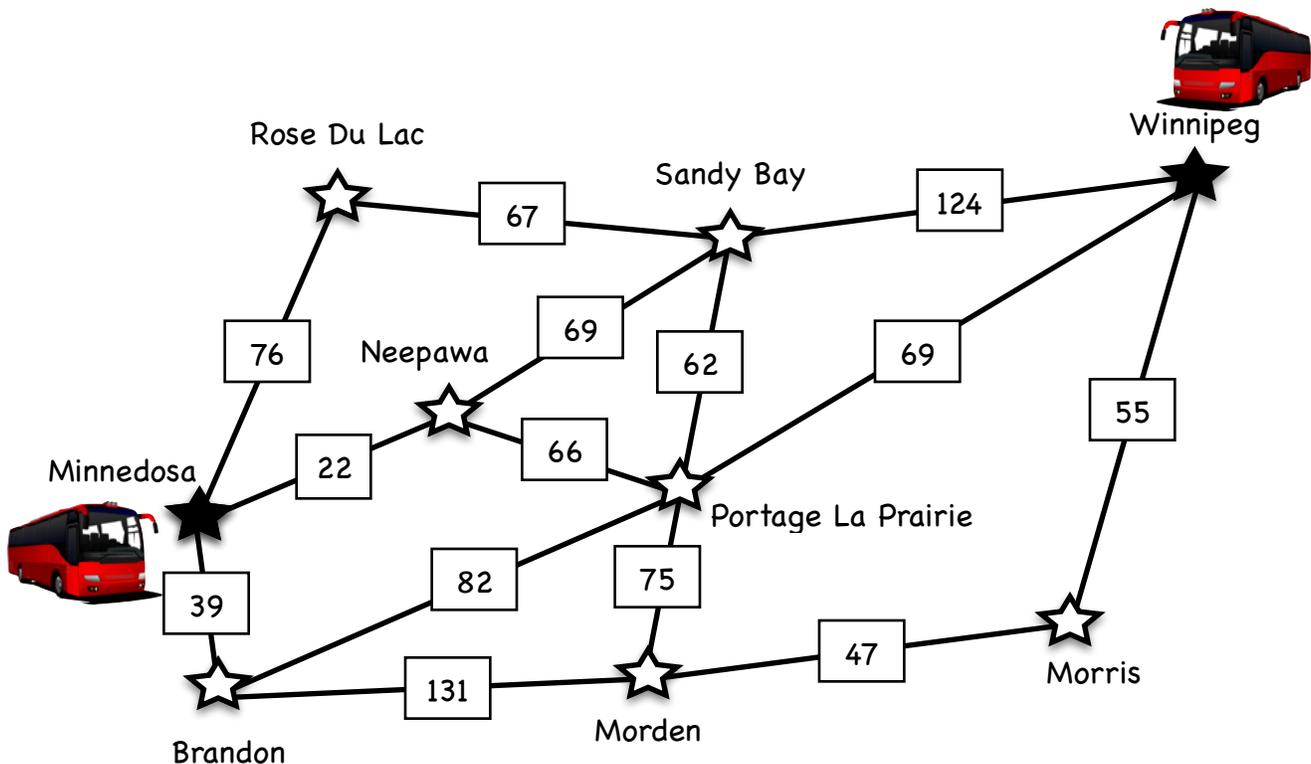
**Problem 20**

\_\_\_\_\_ buses start their routes at 5:30 am.

      
3

The map below shows several cities that buses pass through when they travel from Winnipeg to Brandon. The numbers represent the number of minutes it takes to travel each road.

📍 Use the map to determine the fastest bus route from Winnipeg to Minnedosa.



**Problem 21**

The fastest route from Winnipeg to Minnedosa takes \_\_\_\_\_ minutes

      
3

# I ♥ Math



## MATH PROBLEMS

Casey, Christina, and Cayla worked at the Cut and Style Shop. They put all the tips they earned into a pot and equally divided the money at the end of the month. The money in the pot totaled \$1347. How much did each person receive?



**Problem 22**

Each one received \_\_\_\_\_ dollars.

2

Each chair in the Cut and Style Shop can hold a maximum weight of 450 pounds. A large gentleman walked into the shop. He told the stylist that he weighed 25 pounds less than a quarter of a ton. By how many pounds was the gentleman over or under the maximum weight? (Hint: One ton = 2 000 pounds)



**Problem 23**

The gentleman was \_\_\_\_\_ pounds over / under the maximum weight.

4

When Ethan, Orion, and Kingston walked into the Cut and Style Shop, there were three empty chairs. How many possible ways could they be seated in the three chairs?



**Problem 24**

They could be seated in \_\_\_\_\_ different combinations.

6

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## MATH PROBLEMS

Madison got her hair cut and styled. She gave a 20% tip to her stylist. If the haircut cost \$60, how much was her tip?

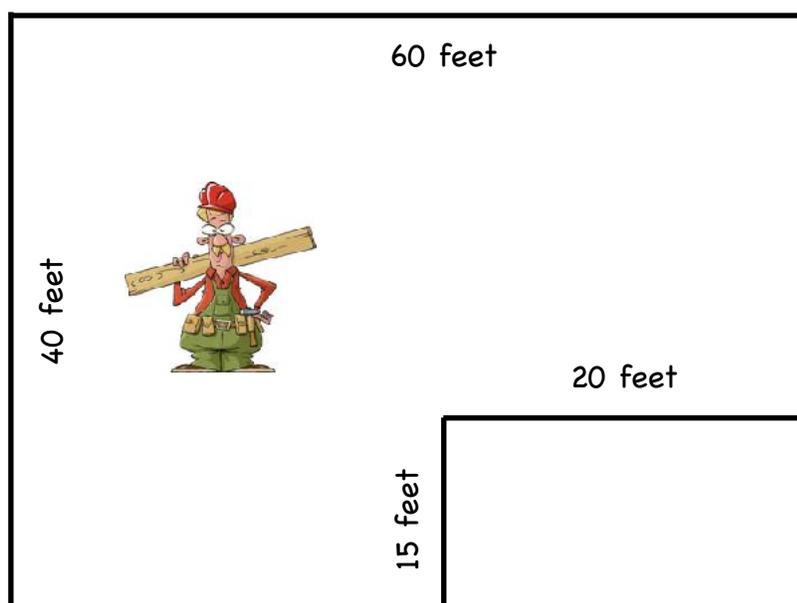


**Problem 25**

The tip was \_\_\_\_\_ dollars.

      
3

The Cut and Style Shop wants to replace the hardwood flooring. If the cost of the flooring is \$7 per square foot, how much will the flooring cost to cover the shop floor?



**Problem 26**

It would cost \_\_\_\_\_ dollars to pay for the hardwood floor.

      
7

# I ♥ Math



## MATH PROBLEMS

There are 30 tables set up for the annual craft sale. Each table is 2 meters long. Norah and Abigail plan to cover each table with a paper tablecloth that extends an extra 10 centimetres over each end so they can tape it underneath. What is the total length of paper needed to cover all the tables?



**Problem 27**

The total length of paper needed is \_\_\_\_\_ meters.

5

Jordan and Casey wanted to make cookies for the craft sale. The recipe for a dozen cookies calls for  $\frac{3}{4}$  cup of milk. The girls want to triple the recipe. How much milk will they need in all?



**Problem 28**

They will need \_\_\_\_\_ cups of milk.

2

Ben and Sam had 1 120 raffle tickets made up for the craft sale. They wanted to sell them at four separate locations. If the tickets were spread out evenly, how many would be sold at each location?



**Problem 29**

\_\_\_\_\_ tickets would be sold at each location.

2

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## MATH PROBLEMS

The boys sold 530 tickets at the first location, 630 at the second, 421 at the third, and 391 at the fourth. What was the average number of tickets sold?



**Problem 30**

The average number of tickets sold at each location was \_\_\_\_\_.

\_\_\_\_\_

4

At the craft sale, there were four stations set up where people donated money toward world water relief. Use the clues below to determine how much money was donated at each of the four stations.

Use the chart below to help you.

Clues:

- Station 3 collected the most with \$343.
- The range of money collected was \$200.
- Station 4 collected the least amount of money.
- Station 2 collected \$84 less than station 3.
- Station 1 collected \$98 more than station 4



Which Station Collected What?				
The Water Project				
Station 1				
Station 2				
Station 3				
Station 4				

Station 1 collected \_\_\_\_\_ dollars.

Station 2 collected \_\_\_\_\_ dollars.

Station 3 collected \_\_\_\_\_ dollars.

Station 4 collected \_\_\_\_\_ dollars.

**Problem 31**

\_\_\_\_\_

4

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## MATH PROBLEMS

Caedmon doesn't know it yet, but he will become the NFL's most prolific quarterback. Caedmon will play 19 seasons and record an average of 4 876 passing yards per year. Use rounded numbers to find out approximately how many yards Caleb will pass for in his career.



**Problem 32**

          
4

Caedmon will pass for approximately \_\_\_\_\_ yards in his career.

At the moment, Brett Farve holds the record for career passing yards at 71 838. Caedmon will pass for 92 644 yards. How many more yards will Caleb pass for?



**Problem 33**

          
2

Caedmon will pass for \_\_\_\_\_ more yards than Brett Farve.

Liam also doesn't know it yet, but he will set the NFL record for most yards receiving in his career. He will play 17 seasons and accumulate 28 901 yards. Use rounded numbers to find out approximately how many receiving yards he gained each season.



**Problem 34**

          
4

Liam will average approximately \_\_\_\_\_ yards receiving each year.

# I ♥ Math



## MATH PROBLEMS

At the moment, Jerry Rice holds the record for career receiving yards at 22 895. If Liam accumulates 28 901 yards, how many more yards will Liam have, compared to Jerry Rice. Calculate the exact answer.



**Problem 35**

Liam will accumulate \_\_\_\_\_ more yards than Jerry Rice.

          
**2**

Caedmon played for 19 seasons and earned an average of \$12 200 000 dollars per season. Liam played for 17 seasons and earned an average of \$9 700 000 dollars per season. Use rounded numbers to calculate approximately how much money the guys made together during their careers.

- Both guys donated 10% of their earnings to their local churches. Approximately how much money did they give away? (Hint: 10% =  $\div 10$ )



Caedmon and Liam made approximately \_\_\_\_\_ dollars in their careers.



The guys gave approximately \_\_\_\_\_ dollars to their local churches.

**Problem 36**

          
**12**

# I ♥ Math



## MATH PROBLEMS

One day, Drake discovered the world's biggest cookie jar. When he showed Alex, they decided to bake cookies to fill it. Each pan they used held 24 cookies. If Drake baked 737 pans and Alex baked 916 pans, how many cookies did they bake altogether. Round off the numbers to come up with an approximate total.



**Problem 37**

          
10

The boys baked approximately \_\_\_\_\_ cookies.

The other 17 boys in grade six discovered the cookie jar that was now filled with cookies. They couldn't help themselves and ate 588 cookies each. How many cookies were left over? Round off the numbers to come up with an approximate total.



**Problem 38**

          
6

There were approximately \_\_\_\_\_ cookies left over.

With the cookies they had left over, Drake and Alex decided to hold a cookie sale. They sold each cookie for 30¢. How much money did they make if they sold all the remaining cookies? This will be an approximate answer.



**Problem 39**

          
3

The boys made approximately \_\_\_\_\_ dollars.

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## MATH PROBLEMS

Dom and Elliott bought some spoons from Dollarama. There were 36 spoons in each package and they purchased 8 packages. How many spoons were there altogether?



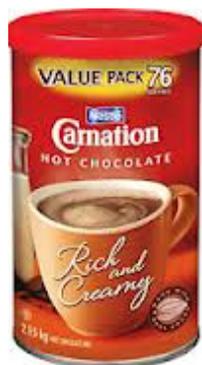
**Problem 40**

          
2

There were \_\_\_\_\_ spoons altogether.

The spoons were used to make hot chocolate. To make each cup, it required 2 spoons of chocolate mix. Each spoon of chocolate mix contained an average of 5 765 granules. If Dom and Elliott made 46 cups from the entire container of chocolate mix, how many granules were there in the container?

 Use rounded numbers to come up with an approximate total.



**Problem 41**

          
6

There were approximately \_\_\_\_\_ granules in the container.

I ♥ Math



## MATH PROBLEMS

Yesterday, there were 60 000 Google searches every second. How many Google searches were there during the whole day?



**Problem 42**

There were \_\_\_\_\_ Google searches.

—  
2

150 000 emails are sent every minute. How many emails are sent in a day?



**Problem 43**

There are \_\_\_\_\_ emails sent in a day.

—  
5

The average reading speed for a grade 6 student is 140 words per minute. Silas spent 8 hours of her weekend reading. How many words did he read?



**Problem 44**

Silas read \_\_\_\_\_ words.

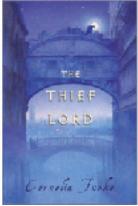
—  
4

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## MATH PROBLEMS

The average grade 6 student types 30 words per minute. How long would it take to type out the book, The People of Sparks, if it contains 83 700 words?



It would take \_\_\_\_\_ minutes.

**Problem 45**

It would take \_\_\_\_\_ hours and \_\_\_\_\_ minutes.

3

If the average grade 6 student walks for 1 hour, he/she will take 6000 steps. During every kilometer, they will take approximately 1500 steps. Cayla and Teren decided to walk for 20 hours, how many steps would they take and how far would they walk in km?



They will take \_\_\_\_\_ steps.

**Problem 46**

They will walk \_\_\_\_\_ km.

4

# I ♥ Math



## MATH PROBLEMS

There were seven serving lines at Calvin's annual Soup 'n' Skate. The total number of people served at each of the seven lines were 151, 118, 142, 134, 112, 132, and 121. What was the median number of people served? (Organize the list of numbers from smallest to biggest. The median is the middle number.)



**Problem 47**

The median number of people served was \_\_\_\_\_ people.

—  
2

Ben finished the race in 11.00 seconds. Peter finished 0.12 seconds faster than Ben. Sam finished 0.18 seconds faster than Peter. How long did it take Sam to finish the race?



**Problem 48**

It took Sam \_\_\_\_\_ seconds to finish the race.

—  
4

Norah wants to take 8 friends to SkyZone to celebrate her birthday. Each admission ticket cost \$15.50 each. How much money will she need for all of them, including her own ticket.



**Problem 49**

Norah will need \_\_\_\_\_ dollars for all of the tickets.

—  
4

# I ♥ Math



## MATH PROBLEMS

The races had 3 732 people in attendance on Thursday, 4 529 people on Friday, and 4 387 people on Saturday. If the racetrack seats 5 000 people, how many empty seats were there in all for the three races?



**Problem 50**

There were \_\_\_\_\_ empty seats in all for the three races.

—  
8

King Motors, Inc. and his employees tested five cars on a short track. The chart below shows the length of time each car took to complete the track once.



Employee's Car	Time
Austin	30 seconds
Lucas	32 seconds
Luke	44 seconds
Ben	51 seconds
Caleb	38 seconds



What is the range of time for these five cars?

(Range is the difference between the biggest and smallest number in a list)

\_\_\_\_\_

What is the average length of time it took the five cars to go around the track one time?

\_\_\_\_\_

**Problem 51**

—  
6

# I ♥ Math



## MATH PROBLEMS

Madison wants her birthday party to last for 4 hours and to be over at least 30 minutes before her bedtime. If her bedtime is at 9:00 p.m., what is the latest time she can start her birthday party?



**Problem 52**

The latest time she can start her birthday party is \_\_\_\_\_ a.m./p.m.

—  
4

Elliott took a jar of candy to school to share with his classmates. There were 964 pieces of candy in the jar. The candy was divided equally among 36 students and both of his teachers. How many pieces of candy did each person receive? How many pieces of candy were left over?



Each person received \_\_\_\_\_ pieces of candy.

\_\_\_\_\_ pieces were left over.

**Problem 53**

—  
4

Shares is baking cookies. For one batch of cookies, she needs  $\frac{1}{4}$  cup of brown sugar and  $1\frac{1}{2}$  cups of white sugar. If she triples the recipe, how much brown sugar and white sugar will she need?



Shares will need \_\_\_\_\_ cup(s) of brown sugar

and \_\_\_\_\_ cup(s) of white sugar.

**Problem 54**

—  
4



**MATH PROBLEMS**

Calvin Christian Elementary School is having a bake sale to raise money for some more MacBook Airs. They are selling pies for \$5.00 each and cookies for \$2.50 a dozen. Casey wants to buy 2 pies and 2 dozen cookies. If she pays with a twenty-dollar bill, what change should she get back?



**Problem 55**  


---

**8**

Casey should get \_\_\_\_\_ back from a twenty-dollar bill.

Five people each volunteered to bake a different kind of pie for the fundraiser bake sale. The five pies are pecan, peach, cherry, apple, and chocolate. Use the clues below to determine who baked each pie.

NAMES	Pecan	Peach	Cherry	Apple	Chocolate

Clues:

1. The names of the five people are Ethan, Elyse, Aliyah, Alina, and Isaac.
2. Isaac did not make a fruit pie.
3. Aliyah made either the peach pie or the apple pie.
4. Elyse made either the cherry pie or the pecan pie.
5. Alina made a pie that starts with the letter "p".
6. One of the boys made the peach pie.

**Problem 56**  


---

**5**



**MATH PROBLEMS**

Sixteen teams are paying in a basketball tournament. Each team will play one game against another team during the first round of the tournament. There is only one gym, so only one game can be played at a time. They have six hours to complete the first round. What is the maximum length of time that can be allowed for each game?

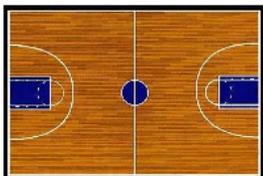


**Problem 57**

The maximum length of each game can be only \_\_\_\_\_ minutes.

—  
6

The basketball court is 50 feet across and 94 feet long. There is a black line painted around the entire basketball court. What is the length of this line?



**Problem 58**

The line is \_\_\_\_\_ feet long.

—  
6

The distance from the three-point mark to the center of the basketball hoop is 19 feet, 9 inches. What is the equivalent length in inches?



**Problem 59**

The distance is \_\_\_\_\_ inches.

—  
4

# I ♥ Math



## MATH PROBLEMS

The first quarter of the championship game lasted 48 minutes. The second quarter lasted 52 minutes. There was a special presentation at half time that lasted 25 minutes. The third quarter lasted 54 minutes and the fourth quarter lasted 49 minutes. If the game started at 6:30 pm, at what time did the game finish?

**Problem 60**

\_\_\_\_\_

**6**

The game finished at \_\_\_\_\_ pm.

Five middle schools played in a basketball tournament. Use the clues to determine how each school placed. Use the chart below to help you.

Clues:

- Franklin Middle School finished in third place.
- Brentwood Middle School placed immediately after Franklin Middle School.
- Central Middle School finished immediately ahead of West Middle School.
- Heath Middle School placed directly after Brentwood Middle School
- Heath's place was the sum of Central's and Brentwood's places.

How did the schools finish?					
	1st	2nd	3rd	4th	5th
Brentwood					
Central					
Franklin					
Heath					
West					

Brentwood placed \_\_\_\_\_.

Heath placed \_\_\_\_\_.

Central placed \_\_\_\_\_.

West paced \_\_\_\_\_.

Franklin placed \_\_\_\_\_.

**Problem 61**

\_\_\_\_\_

**5**