



MATHEMATICS



N.S. Yr. 3 P.67

**Solve simple word problems and
explain how problems were solved**

Equipment

Paper, pencil, ruler

MathSphere

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Concepts

In year 3 children are expected to use any of the four operations to solve ‘story’ problems.

Once again these problems can be divided into one step and two step problems – the latter meaning that two calculations have to be done in order to get the answer.

Children should explain orally how they set about answering the questions and then move on to written methods using simple number sentences.

There are also similar modules on money, time and measurement.

One step operations

I'm thinking of a number.
I subtract 15
The answer is 20.
What was my number?

I'm thinking of a number.
I add 35.
The answer is 80.
What was my number?



I'm thinking of a number.
I halve it.
The answer is 19.
What was my number?

I'm thinking of a number.
I double it.
The answer is 52.
What was my number?



I'm thinking of a number.
I subtract 25.
The answer is 60.
What was my number?

One step operations

I'm thinking of a number.
I subtract 45
The answer is 35.
What was my number?

I'm thinking of a number.
I add 19.
The answer is 50.
What was my number?



I'm thinking of a number.
I halve it.
The answer is 27.
What was my number?

I'm thinking of a number.
I double it.
The answer is 56.
What was my number?



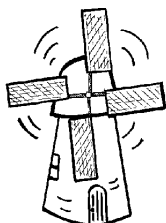
I'm thinking of a number.
I subtract 55.
The answer is 25.
What was my number?

Story problems

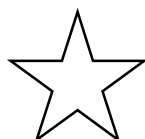
1. A ladybird has six legs.
How many legs do 5 ladybirds have?
2. How many legs do 4 ladybirds have?



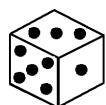
3. A flower has eight petals.
How many petals would 10 flowers have?
4. How many petals do two flowers have?



5. A windmill has 4 sails.
How many sails do 3 windmills have?
6. How many sails do 5 windmills have?



7. A star has 5 points.
How many points would 5 stars have?
8. How many points would 6 stars have?



9. How many dots are there on all six sides of a die?
10. How many dots are there on 10 dice?

One step operations

A bag of sweets has 35 toffees in it.

1. How many toffees are left if you eat 16 ?
2. How many children could have 5 toffees each?
3. If they were shared in half how many would be left over?
4. How many toffees would there be in two bags of 35?

Here are Kara, Kim and Katrin's bowling scores:



Kara	110
Kim	100
Katrin	99

5. How many did Kara and Kim score altogether?
6. How many more did Kara score than Katrin?
7. What was the total score for all three girls?

At the local dog show there were these numbers of entries:



Labrador	12
Great Dane	7
Poodle	15

8. How many more Poodles were there than Labradors?
9. How many more Labradors were there than Great Danes?
10. What was the total number of dogs entered?

One step operations

A bag of sweets has 45 toffees in it.

1. How many toffees are left if you eat 19 ?
2. How many children could have 5 toffees each?
3. If they were shared in half how many would be left over?
4. How many toffees would there be in two bags of 45?

Here are Peter, Pat and Paul's bowling scores:



Peter	105
Pat	85
Paul	95

5. How many did Peter and Pat score altogether?
6. How many more did Peter score than Paul?
7. What was the total score for all three boys?

At the local dog show there were these numbers of entries:



Corgi	12
Terrier	7
Sausage dog	15

8. How many more Corgis were there than Terriers?
9. How many more Sausage dogs were there than Corgis?
10. What was the total number of dogs entered?

Two step problems**The Pet shop**

1. The Pet Shop had 15 rabbits.
8 were sold and 5 were brought in.
How many rabbits did the shop now have?
2. The Pet Shop had 20 gerbils.
The gerbils had 12 babies. 8 of the gerbils were sold.
How many gerbils did the shop now have?
3. The pet shop had 16 budgies.
It sold 12 and then bought 25.
How many budgies did the shop now have?

**The Airport**

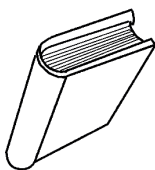
4. There were 25 planes at the airport.
15 more planes landed and 9 took off.
How many planes were there now at the airport?
5. There were 460 passengers on a jet to Paris.
250 passengers got off when it landed and 190 got on.
How many passengers were now on the jet?
6. 3 planes each had 200 passengers on board.
Half were children.
How many children were on the three planes?

Two step problems**The Pet shop**

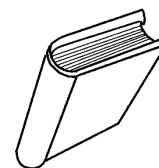
1. The Pet Shop had 35 rabbits.
9 were sold and 12 were brought in.
How many rabbits did the shop now have?
2. The Pet Shop had 40 gerbils.
The gerbils had 22 babies. 15 of the gerbils were sold.
How many gerbils did the shop now have?
3. The pet shop had 36 budgies.
It sold 19 and then bought 15.
How many budgies did the shop now have?

**The Airport**

4. There were 33 planes at the airport.
16 more planes landed and 8 took off.
How many planes were there now at the airport?
5. There were 380 passengers on a jet to Paris.
290 passengers got off when it landed and 150 got on.
How many passengers were now on the jet?
6. 4 planes each had 150 passengers on board.
Half were children.
How many children were on the four planes?



The Library



**There were 26 books on the top shelf of the sports books,
35 on the middle shelf and 20 on the bottom shelf.**

1. How many books were there on the top and middle shelves?

2. How many books were on the middle and bottom shelves?

3. How many sports books were there altogether?

4. If 32 books are taken out how many would be left?



The Greengrocers



The Greengrocer had 80 apples, 65 bananas and 45 plums.

5. How many apples and plums did he have?

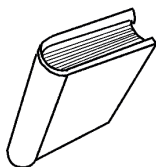
6. How many more bananas than plums did he have?

7. He wanted to have 100 of each fruit.
How many extra apples, bananas and
plums did he have to get?

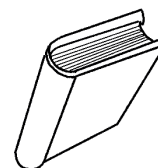
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8. When he had got his 100 of each a shopper
bought 30 apples, 6 bananas and 12 plums.
How many of each fruit did he have left?

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The Library



There were 34 books on the top shelf of the sports books, 29 on the middle shelf and 50 on the bottom shelf.

1. How many books were there on the top and middle shelves?

2. How many books were on the middle and bottom shelves?

3. How many sports books were there altogether?

4. If 14 books are taken out how many would be left?



The Greengrocers



The Greengrocer had 70 apples, 34 bananas and 43 plums.

5. How many apples and bananas did he have?

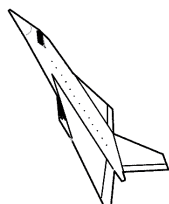
6. How many more apples than plums did he have?

7. He wanted to have 100 of each fruit.
How many extra apples, bananas and
plums did he have to get?

<input type="text"/>	<input type="text"/>	<input type="text"/>
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8. When he had got his 100 of each a shopper
bought 40 apples, 15 bananas and 38 plums.
How many of each fruit did he have left?

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**Flights around the world**

1. 300 people were on the plane when it landed at Geneva.
120 people got off and 200 got on.
How many were now on the plane?
2. 400 people were on the plane when it took off from Heathrow.
90 got off at Madras and 120 got off at Singapore.
How many were now on the plane?
3. The plane has 700 seats.
It was half full when it went to Australia.
How many seats were empty?
4. On the flight to Dublin there were 75 children.
Each child had two bags.
How many bags were there altogether?
5. Only a quarter of the passengers wanted their meal.
If there were 200 passengers, how many wanted a meal?
6. The plane had 65 people on board.
Each person had two drinks.
How many drinks did they have altogether?

Ten Pin Bowling

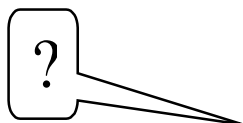
Sue and her friends went ten pin bowling. These were their final scores:



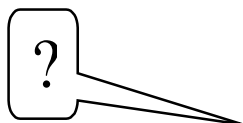
Sue	44
Paula	76
Neeta	98
Nina	63
Zoe	89



1. What was the total score for Sue and Paula?
2. How many more did Zoe get than Nina?
3. What was the total score for Neeta and Paula?
4. How many more did Neeta score than Zoe?
5. Sue played again and doubled her score.
What score did she get in her second game?
6. Zoe played again and scored 21 more.
What score did she get in her second game?
7. Nina scored 100 on her second game.
How many more did she score?

**Think of a number!**

1. I think of a number, double it and add 4.
The answer is 22. What is my number?
2. I think of a number, double it and add 10.
The answer is 34. What is my number?
3. I think of a number, double it and subtract 3.
The answer is 13. What is my number?
4. I think of a number, double it and subtract 6.
The answer is 24. What is my number?
5. I think of a number, halve it and add 4.
The answer is 14. What is my number?
6. I think of a number, halve it and add 7.
The answer is 17. What is my number?
7. I think of a number, halve it and subtract 1.
The answer is 5. What is my number?
8. I think of a number, halve it and subtract 3.
The answer is 47. What is my number?

**Think of a number!**

1. I think of a number, double it and add 8.
The answer is 38. What is my number?
2. I think of a number, double it and add 9.
The answer is 59. What is my number?
3. I think of a number, double it and subtract 5.
The answer is 19. What is my number?
4. I think of a number, double it and subtract 7.
The answer is 83. What is my number?
5. I think of a number, halve it and add 2.
The answer is 17. What is my number?
6. I think of a number, halve it and add 3.
The answer is 23. What is my number?
7. I think of a number, halve it and subtract 5.
The answer is 1. What is my number?
8. I think of a number, halve it and subtract 9.
The answer is 41. What is my number?

Answers**Page 3**

1. 35 2. 45 3. 38 4. 26 5. 85

Page 4

1. 80 2. 31 3. 54 4. 28 5. 80

Page 5

1. 30 2. 24 3. 80 4. 16 5. 12 6. 20 7. 25 8. 30 9. 21 10. 210

Page 6

1. 19 2. 7 3. 1 4. 70 5. 210 6. 11 7. 309 8. 3 9. 5 10. 34

Page 7

1. 26 2. 9 3. 1 4. 90 5. 190 6. 10 7. 285 8. 6 9. 3 10. 42

Page 8

1. 12 2. 24 3. 29 4. 31 5. 400 6. 300

Page 9

1. 38 2. 47 3. 32 4. 41 5. 240 6. 300

Page 101. 61 2. 55 3. 81 4. 49 5. 125 6. 20
7. 20, 35, 55 8. 70, 94, 88**Page 11**1. 63 2. 79 3. 113 4. 99 5. 104 6. 27
7. 30, 66, 57 8. 60, 85, 62**Page 12**

1. 380 2. 190 3. 350 4. 150 5. 50 6. 130

Page 13

1. 120 2. 26 3. 174 4. 9 5. 88 6. 110 7. 37

Page 14

1. 9 2. 12 3. 8 4. 15 5. 20 6. 20 7. 12 8. 100

Page 15

1. 15 2. 25 3. 12 4. 45 5. 30 6. 40 7. 12 8. 100