101 Must-Know Challenging Maths Word Problems

Name: _____

Class: _____

Book 4

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101 MUST-KNOW CHALLENGING MATHS WORD PROBLEMS FOR PRIMARY 4

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Preface

101 Must-Know Challenging Maths Word Problems for Primary 4 presents word problems that test on important concepts so students can learn to apply general mathematical problem-solving strategies and heuristics confidently.

This book comprises word problems often encountered by students in their tests and examinations. The questions are categorized into respective topics in accordance with the current **Primary Mathematics Syllabus**. **Detailed step-by-step workings** are included in the answer key for every question to show how a problem is solved. **Diagrams and mathematical models** are provided in most solutions to aid students in understanding the problem-solving processes.

This set of comprehensive word problems will allow students to develop and hone creative and critical thinking skills. Students will find this book useful as a resource for good maths questions and a reference for problem-solving methods.

The Editorial Team

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Question 1

On the first day of a school camp, there were 396 children. 27 boys left the camp on the second day. If there were twice as many boys as girls who remained at the camp, how many boys were there on the first day of the camp?

Answer: _____

Question 2

On Monday, Farmer Tom collected three times as many eggs as Farmer Jack. On Tuesday, Farmer Tom sold 160 eggs. Farmer Jack then had twice as many eggs as Farmer Tom. How many eggs did Farmer Jack have?

Answer: _____

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Question 3

When George is 15 years old, his sister is 8 years old and his father is 45 years old. How old will George's sister be when George is half his father's age?

Answer: _____

Question 4

Linda and Serene had an equal number of balloons. After Linda used 16 balloons, Serene had 3 times as many balloons as Linda. How many balloons did Serene have?

Answer: _____

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Question 5

Jennifer had a party. She wanted to give an equal number of balloons to her six friends. If one of her friends did not turn up for the party, the rest would be able to receive another 2 balloons each. How many balloons did Jennifer have?

Answer: _____

Question 6

Anna had three times as many beads as Zoe. They had 480 beads altogether. Mrs Taylor gave an equal number of beads to each of them. Zoe then had half the number of beads that Anna had. How many beads did Mrs Taylor give them?

Answer: _____

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Question 7

Helen had to arrange some chairs in a fixed number of rows. She estimated that there were more than 30 but fewer than 70 chairs. If she put 8 chairs in one row, she would be 7 chairs short. If she put 7 chairs in one row, she would have 2 chairs left. How many chairs were there?

Answer: _____

Question 8

Zack and Mandy shared 120 sweets. After Zack gave Mandy 10 sweets, he had twice as many sweets as Mandy. How many sweets did each of them have at first?

Answers: Mandy: _____

Zack: _____

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Question 9

A basket contained 4 times as many blue balls as red balls. After 21 blue balls were taken away, there were twice as many red balls as blue balls. How many balls were there in the basket at first?

Answer: _____

Question 10

Nancy had $\frac{1}{3}$ as much money as Ben. Lucy had $20 more than Ben. They had $132 altogether. How much did each of them have?

Answers: Nancy: _____

Ben: _____

Lucy: _____

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Question 11

There were three parcels, A, B and C. The mass of Parcel B was $\frac{3}{4}$ kg less than the mass of Parcel A. The mass of Parcel C was $\frac{2}{3}$ kg more than the mass of Parcel B. If the mass of Parcel A was $4\frac{1}{2}$ kg, what was the mass of Parcel C?

Answer: _____

Question 12

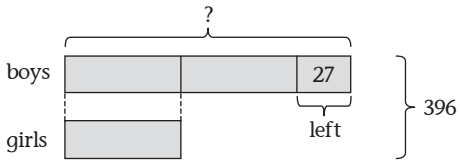
Mr Rice spent $\frac{1}{5}$ of his salary on food and $\frac{2}{3}$ on clothing. Half of the remaining amount was given to his wife and he saved the rest. If he had saved $520, what was Mr Rice's salary?

Answer: _____

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Solution to Question 1

Step 1 : Draw a model



Step 2 : Find how many children remained at the camp

396 – 27 = 369

Step 3 : Find the number of girls at the camp

3 units → 369

1 unit → 369 ÷ 3 = 123

Step 4 : Find the number of boys there were on the first day of camp

2 units → 2 × 123 = 246

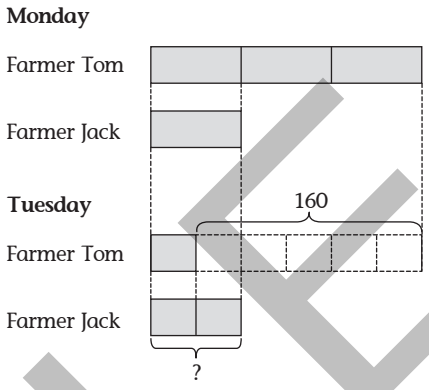
246 + 27 = 273

There were 273 boys on the first day of the camp.

Answer: 273 boys

Solution to Question 2

Step 1 : Draw a model



Step 2 : Find the number of eggs Farmer Tom had left

5 units → 160

1 unit → 160 ÷ 5 = 32

Step 3 : Find the number of eggs Farmer Jack had

2 units → 2 × 32 = 64

Farmer Jack had 64 eggs.

Answer: 64 eggs

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