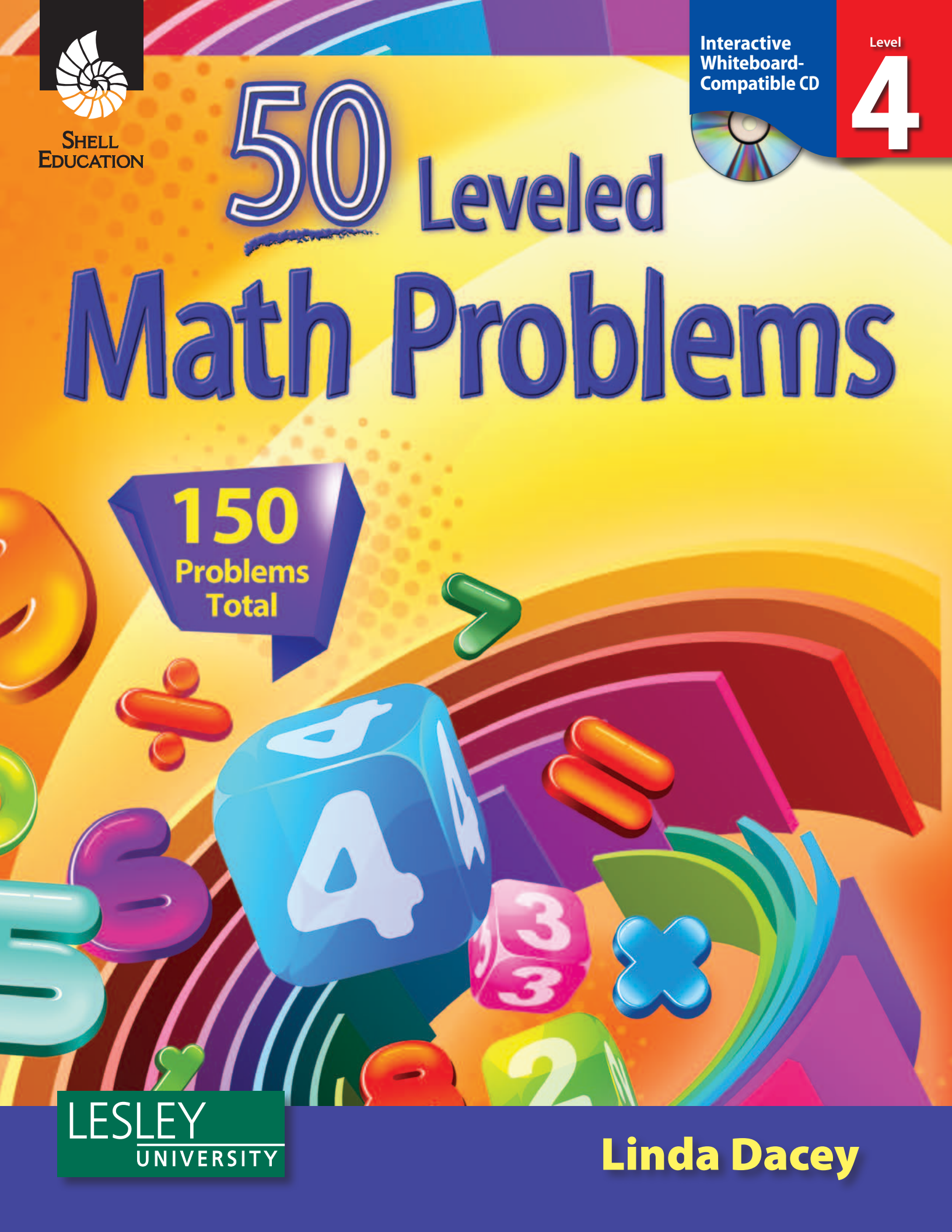
Shell Education
Interactive Whiteboard-Compatible CD
Level 4
50 Leveled Math Problems
150 Problems Total
LESLEY UNIVERSITY
Linda Dacey

Table of Contents

Introduction

Problem Solving in Mathematics Instruction 5

Understanding the Problem-Solving Process 7

Problem-Solving Strategies..... 12

Ask, Don't Tell 14

Differentiating with Leveled Problems 15

Management and Assessment 18

How to Use This Book 22

Correlations to Standards 26

Leveled Problem-Solving Lessons

Operations and Algebraic Thinking

In the Garden.....32
Strings of Beads.....34
Number Counts 36
Growing Creatures.....38
Piles of Pennies 40
Whose Is Whose?.....42
Class Trips 44
Pattern Questions 46

Number and Operations in Base Ten

Craft Stories 48
Number Models 50
Check It Out.....52
Trivia 54
Broken Calculator.....56
Puzzlers 58
Author, Author!.....60
How Many Seats?.....62
Use What You Know.....64
Make It True.....66
Pictograms 68

Table of Contents *(cont.)*

Number and Operations—Fractions

On the Path 70
Know Your Numbers 72
Which Number Is It? 74
Birthday Party 76
Make the Numbers 78
Bake Off 80
Fraction Figures 82
What Would You Do? 84
Create a Decimal 86
On the Number Line 88

Measurement and Data

Water Animals 90
Timely Matters 92
Going Places 94
Shopping 96
My Bedroom Floor 98
Around and Inside 100
Sensible Measures 102
Banks 104
At the Race 106
Balancing Acts 108
Line Plots 110
What's the Angle? 112
Angle Measures 114

Geometry

Lines of Symmetry 116
What Shape Am I? 118
Draw Me 120
Name the Shape 122
Tangram Shapes 124
Venn Diagram 126
Hidden Figures 128
Who Drew What? 130

Appendices

Appendix A: Student Response Form 132
Appendix B: Individual Observation Form 133
Appendix C: Group Observation Form 134
Appendix D: Record-Keeping Chart 135
Appendix E: Answer Key 136
Appendix F: References Cited 141
Appendix G: Contents of the Teacher Resource CD 142

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Strings of Beads

Standard

Multiplies and divides whole numbers

Overview

Given the costs of beads, students calculate the cost of a necklace.

Problem-Solving Strategies

- Count, compute, or write an equation
- Use logical reasoning

Materials

- *Strings of Beads* (page 35; stringsbeads.pdf)
- *Bead Problem* (beadproblem.pdf)
- *Student Response Form* (page 132; studentresponse.pdf) *(optional)*

Activate

1. Engage students in the context by asking, *Have you ever strung beads? What did you make?*
2. Display the *Bead Problem* for students to solve. Ask *How much did the beads for these earrings cost? ($40)*
3. Have students share how they found the total. Record their responses. (Possibilities include: $5 + 10 + 5 + 5 + 10 + 5$; $2 \times 10 + 4 \times 5$; 8×5; finding the total of one earring and then doubling that cost.)

Solve

1. Distribute copies of *Strings of Beads* to students. Have students work alone or in pairs.
2. Ask clarifying and refocusing questions, such as *How many of these beads are there? How are you keeping track of what you are finding?*
3. Before debriefing, you may want students to place their work on their desks and take a gallery walk to see what strategies others used and how they recorded their thinking.

Debrief

1. What strategies did you use?
2. Who can show us a different way?

Differentiate

Pair students who continue to rely on addition and subtraction with those who are more likely to use multiplication and division. Exposure to each other's thinking will allow both students to remember the relationship between addition and multiplication.

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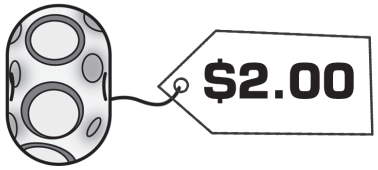
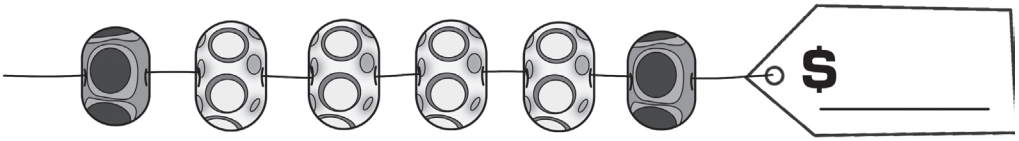
Strings of Beads ○

costs three times as much as


What is the cost of the necklace?

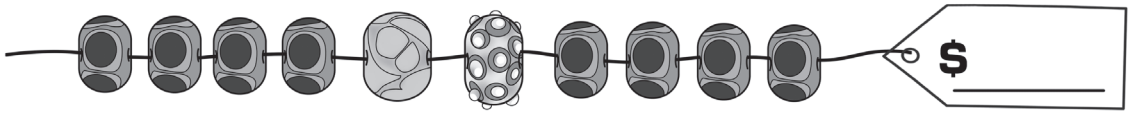


Strings of Beads □

costs three times as much as

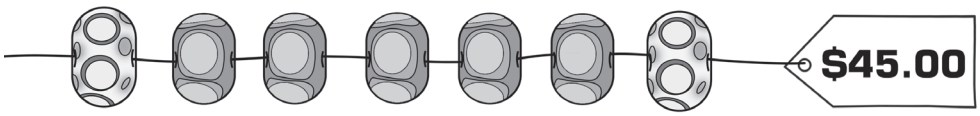
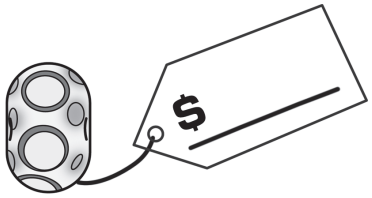
costs twice as much as

What is the cost of the necklace?



Strings of Beads △

costs twice as much as



What is the cost of the bead?