



SHELL
EDUCATION

Interactive
Whiteboard-
Compatible CD

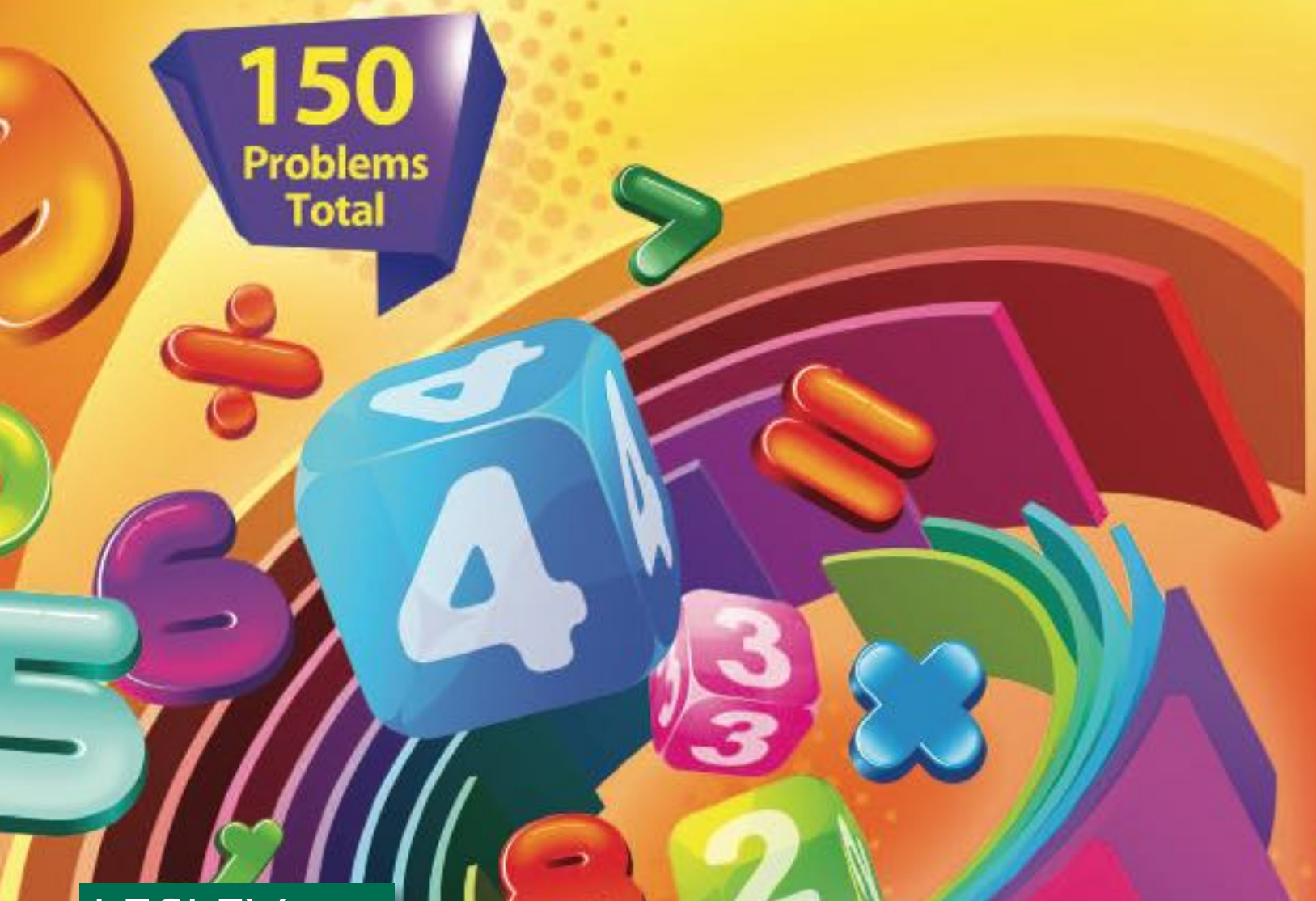


Level

4

50 Leveled Math Problems

150
Problems
Total



LESLEY
UNIVERSITY

Linda Dacey

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Leveled Problem-Solving Lessons

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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.

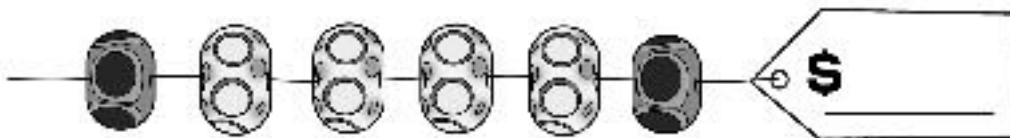
Strings of Beads ○



costs three times as much as



What is the cost of the necklace?



Strings of Beads □



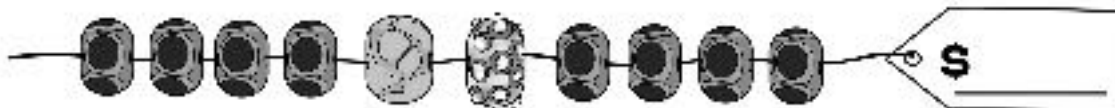
costs three times as much as



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?

