

Problemoids

Grade 4 Math Challenge Workbook

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Royal Fireworks Press
Unionville, New York

Table of Contents

Problemoids:

1. Lucky Combination	2	19. Check the Corners	38
2. Century Toss	4	20. Shelling Out Seashells . . .	40
3. Have It Your Way	6	21. Taste Test	42
4. A Fishy Story	8	22. Raising Questions	44
5. Pacific Puzzler	10	23. SOS	46
6. Sticky Addition	12	24. Tower of Triangles	48
7. Stairway to the Top	14	25. Engineering a Fraction . . .	52
8. Pennant Fever	16	26. Join Up	54
9. Seven for Sisters	18	27. Serving the Class	56
10. A Few Are Due	20	28. Can Clean	58
11. Crazy Cube	22	29. Comic Question	60
12. Computer Survey	24	30. Sporty Product	62
13. Mean Scream	26	31. Dotygons	64
14. An Odd Tee Shirt	28	32. Raking It In	68
15. Box Lunch	30	33. Dirty Fractions	70
16. Pizza Pieces	32	34. Small Profits	72
17. Penny Pincher	34	35. Shangri-La	74
18. Ups and Downs	36	36. Running for the Gold	76

15. Box Lunch

At Pete’s Burger Shack there is a special sale. You can buy a lunch box, the same lunch box with a plain burger for \$5.00, or the same lunch box with a monster burger for \$7.00. The monster burger costs three times as much as the plain burger.

How much would the lunch box cost by itself?

Hint 1

Use All Given and Implied Information. Since the lunch box with the monster burger costs \$7.00 and the lunch box with the plain burger costs \$5.00, how much more does the monster burger cost than the plain burger? Then how much must the plain burger cost? Then how much does the lunch box cost?

Hint 2

Use Trial and Error and Work Backward. Guess how much the lunch box costs. Then figure how much the plain burger must cost and how much the monster burger must cost according to your guess. Check whether your guess is correct using the conditions of the problem. *Make a Chart* to keep track of your guesses. For example:

Guess cost of lunch box	Then find cost of plain burger	Then find cost of monster burger	To check, ask yourself, “Is three times the cost of the plain burger equal to the monster burger?”
\$1.00	$\begin{array}{r} \$5.00 \\ -1.00 \\ \hline \$4.00 \end{array}$	$\begin{array}{r} \$7.00 \\ -1.00 \\ \hline \$6.00 \end{array}$	$\begin{array}{r} \$4.00 \\ \times 3 \\ \hline \$12.00 \end{array}$ <p>No, \$12.00 does not equal the cost of monster burger.</p>
Guess again			

15. Box Lunch - Looking Back Questions

- (A) Suppose the lunch box with a plain burger costs \$4.50, the same lunch box with a monster burger costs \$7.00, and the monster burger costs three times as much as the plain burger. How much would the lunch box cost by itself?

(Hint: *Use All Given and Implied Information.* How much more does the monster burger cost than the plain burger?)

- (B) At Seymour Blubber's Cake Shop, a yellow cake covered with sprinkles costs \$6.50. The same yellow cake with chocolate icing costs \$8.30. The chocolate icing costs three times as much as the sprinkles. How much would a yellow cake with no icing cost?

(Hint: *Use All Given and Implied Information.* How much more does the chocolate icing cost than the sprinkles?)

- (C) At Hector's Cake Shop a yellow cake covered with sprinkles costs \$6.50. The same yellow cake with chocolate icing costs \$8.50. The chocolate icing used at Hector's Cake Shop costs four times as much as the sprinkles. How much would a yellow cake with no icing cost?

- (D) At Leo's Gift Shop a Scottie dog savings bank and a music box cost \$8.30. The Scottie dog savings bank costs \$1.00 more than the music box. How much would a Scottie dog savings bank cost?