

LAB 1–D NOTES

FISH PROBLEM

Purpose: Problem solving

The Fish Problem emphasizes using nonroutine problem-solving strategies. This problem may introduce the notion of uniqueness of answers.

Materials: Fish Problem sheet (one per student)

Directions: Place students in groups of two, three, or four. Distribute the problem sheets. Tell students they are to answer each question individually but they can solve the problem within their group.

Allow students 25–30 minutes to complete. Before the period ends, have them share their findings.

1. How much does a fish weigh if its tail weighs 4 kilograms (kg), its head weighs as much as its tail and half its body, and its body weighs as much as its head and tail together?

Body is 16 kg, head is 12 kg, and tail is 4 kg, so the fish weighs 32 kg.

2. Describe your solution method.

Answers may vary. Solution methods should match the solution shown in number 1.

3. Is your answer unique? How do you know?

Answers may vary. Students should indicate that the answer is unique, but their justifications may differ.