

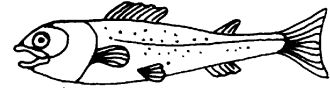
Name _____

Analyze Strategies: Use Logical Reasoning

Use logical reasoning to solve the problem.

1. Five friends went fishing on a school campout. Sarah, Nancy, Marta, Frank and Yoko each caught one fish. Read the clues. Then use them to determine each student's catch.

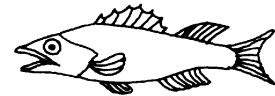
- Marta's fish was longer than Sarah's fish.
- Yoko's fish was 2 in. longer than Nancy's fish.
- The length of Sarah's fish was not a multiple of 2.
- Nancy did not catch the smallest fish.



trout 16 in.



catfish 13 in.



bass 8 in.



minnow 2 in.



bluegill 6 in.

Who caught which fish?

- a. Sarah _____ b. Nancy _____
c. Marta _____ d. Frank _____
e. Yoko _____

Use any strategy to solve each problem.

2. Kevin collected 50 sea creatures. He has sand dollars, starfish, and sea urchins. Use these clues to find out how many of each type he has.

- He has four times as many starfish as sand dollars.
- He has 8 more sea urchins than sand dollars.

- a. starfish _____ b. sand dollars _____
c. sea urchins _____

3. In a line of 30 students entering school, 15 have coats, 12 have hats, and 8 have both coats and hats.

- a. How many students have only coats? _____
b. How many students have neither a coat nor a hat? _____

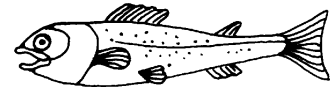
Answer Key

**Analyze Strategies:
Use Logical Reasoning**

Use logical reasoning to solve the problem.

1. Five friends went fishing on a school campout. Sarah, Nancy, Marta, Frank and Yoko each caught one fish. Read the clues. Then use them to determine each student's catch.

- Marta's fish was longer than Sarah's fish.
- Yoko's fish was 2 in. longer than Nancy's fish.
- The length of Sarah's fish was not a multiple of 2.
- Nancy did not catch the smallest fish.



trout 16 in.



catfish 13 in.



bass 8 in.



minnow 2 in.



bluegill 6 in.

Who caught which fish?

- a. Sarah Catfish b. Nancy Bluegill
c. Marta Trout d. Frank Minnow
e. Yoko Bass

Use any strategy to solve each problem.

2. Kevin collected 50 sea creatures. He has sand dollars, starfish, and sea urchins. Use these clues to find out how many of each type he has.

- He has four times as many starfish as sand dollars.
- He has 8 more sea urchins than sand dollars.

- a. starfish 28 b. sand dollars 7
c. sea urchins 15

3. In a line of 30 students entering school, 15 have coats, 12 have hats, and 8 have both coats and hats.

- a. How many students have only coats? 7
b. How many students have neither a coat nor a hat? 11