

Problem-Solving Decisions: Reasonable Answers

Use the questions to help you solve.

1. Rigoberto is making a tabletop scale model of the Nile River. The Nile River is 4,160 miles long. He considers these scales:
Which scale makes the most sense for his model? Why?

- 1 inch = 1 mile
- 1 inch = 10 miles
- 1 inch = 100 miles
- 1 inch = 1,000 miles

UNDERSTAND

What factors affect Rigoberto's decision?

PLAN

How can you check each scale to decide if it is reasonable?

SOLVE

Why isn't 1 inch = 1 mile a reasonable scale for his model?

Would any of the scales produce a model that is too small?

Which scale is about the right size for a tabletop?

LOOK BACK

Does your answer include a full explanation? If not, add a complete explanation.

2. Betina is drawing a scale diagram of Mount Aconcagua for the front page of her report. This Argentinean mountain is 22,834 feet high. She considers these scales:
Which scale is most appropriate for her diagram?

- 1 inch = 5 feet
- 1 inch = 50 feet
- 1 inch = 500 feet
- 1 inch = 5,000 feet