Problem-Solving Strategy: Find a Pattern

Use the questions to help you solve.

1. A swimmer is gradually increasing the distance he swims each week. The chart below shows the distances he swims for the first 5 weeks of his program. If he continues the same pattern of increase, how far will he swim during the tenth week?

<table>
<thead>
<tr>
<th>Swimming Distances (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
</tr>
<tr>
<td>1.3</td>
</tr>
</tbody>
</table>

**UNDERSTAND**

What facts do you know that will help you answer the question?

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**PLAN**

Look for a pattern in the numbers. Do the numbers seem to increase by addition or multiplication? ________________________

**SOLVE**

List how the distances change each week.

How can you describe the pattern of increase?

How can you extend the pattern for five more weeks?

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**LOOK BACK**

How can you explain your solution to a younger student? Write one or two sentences that tell why your answer is reasonable.

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2. Swimming competitions are held on October 6, October 13, October 19, October 26, and November 1. If this pattern continues, how many competitions will be held in November? Explain your answer.

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