

Misconception/Error	Suggested Intervention
<p>1. Student has difficulty getting started.</p>	<ul style="list-style-type: none"> <li>• Provide guidance to student by asking questions such as: what is the problem asking? could you draw a picture and label it?</li> <li>• Provide additional experiences to solve word problems with the same or similar context.</li> <li>• Highlight or circle key words.</li> <li>• Provide guidance about reading problems and determining what the question is.</li> <li>• Explain what a lap is in this problem.</li> </ul>
<p>2. Student does not understand the relationship between inches and miles in the problem.</p>	<ul style="list-style-type: none"> <li>• Give student experiences solving problems using scale on a map, drawing, etc.</li> <li>• Help students relate the scale to real life situations.</li> </ul>
<p>3. Student multiplied various numbers in the problem rather than write a proportion.</p>	<ul style="list-style-type: none"> <li>• Use picture to explain the meaning of one mile and the length of the trail</li> <li>• Determine the relationship between inches and miles.</li> <li>• Give the student practice with similar problems.</li> <li>• Connect multiplication to the picture with a ruler or other linear measurement model.</li> <li>• Help student see that 5 inches equals 1 mile.</li> </ul>
<p>4. Student lacks understanding of proportions.</p>	<ul style="list-style-type: none"> <li>• Ask – how did you come up with 5 in = 1 mile? If 5 in = 1 mile then many inches = 4 miles?</li> <li>• Estimate how many laps Jenna will need to run to equal 4 miles.</li> <li>• Provide experiences with other proportions using simpler numbers</li> <li>• Provide additional practice solving proportional</li> </ul>

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	reasoning problems. <ul style="list-style-type: none"> <li>• Have student work in small group with other students who can set up proportions.</li> </ul>
5. Student has difficulty communicating strategy.	<ul style="list-style-type: none"> <li>• Have student show another way to solve the problem.</li> <li>• Use “think alouds” to model doing similar problems.</li> <li>• Provide opportunities for students to work in small group or with partners to share problem solving strategies.</li> <li>• Color-code the visual. Add laps to the diagram in a different color.</li> <li>• Label diagram in units.</li> <li>• Have student explain the strategy he used in own words.</li> <li>• Have student write how he solved the problem in own words.</li> </ul>
6. Student can state that 4 miles equals 20 inches but cannot determine the number of laps Jenna must make.	<ul style="list-style-type: none"> <li>• Explain in own words what the problem is asking.</li> <li>• Have student determine the length in miles of one lap.</li> <li>• Students should experience peer coaching opportunities to include peer explanations and justifications orally and in writing.</li> </ul>