UNIT 2 • REASONING WITH LINEAR EQUATIONS AND INEQUALITIES
Lesson 1: Creating Linear Equations and Inequalities in One Variable

Problem-Based Task 2.1.1: Rafting and Hiking Trip

SMP	
1 ✓	2 ✓
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To celebrate graduation, you and 4 of your closest friends have decided to take a 5-day white-water rafting and hiking trip. During your 5-day trip, 2 days are spent rafting. If the rafting trip covers a distance of 60 miles and you are expected to raft 8 hours each day, how many miles must you raft each hour?

For the hiking portion of your trip, you and your friends carry the same amount of equipment, which works out to 35 pounds of equipment each. For extra money, you can hire an assistant, who will carry 50 pounds of equipment. Each assistant charges a flat fee of $50 and an additional $22 for each mile. The total amount you would have to pay 1 assistant is $512. How many miles will your group be hiking? Is it worth hiring 2 assistants to help you and your friends carry the equipment? Justify your answers.

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