

# Unit 5 Lesson 4: Comparing Relationships with Tables

## 1 Adjusting a Recipe (Warm up)

### Student Task Statement

A lemonade recipe calls for the juice of 5 lemons, 2 cups of water, and 2 tablespoons of honey.

Invent four new versions of this lemonade recipe:

1. One that would make more lemonade but taste the same as the original recipe.
2. One that would make less lemonade but taste the same as the original recipe.
3. One that would have a stronger lemon taste than the original recipe.
4. One that would have a weaker lemon taste than the original recipe.

## 2 Visiting the State Park

### Student Task Statement

Entrance to a state park costs \$6 per vehicle, plus \$2 per person in the vehicle.

1. How much would it cost for a car with 2 people to enter the park? 4 people? 10 people? Record your answers in the table.

number of people in vehicle	total entrance cost in dollars
2	
4	
10	

2. For each row in the table, if each person in the vehicle splits the entrance cost equally, how much will each person pay?
3. How might you determine the entrance cost for a bus with 50 people?
4. Is the relationship between the number of people and the total entrance cost a proportional relationship? Explain how you know.

### 3 Running Laps

#### Student Task Statement

Han and Clare were running laps around the track. The coach recorded their times at the end of laps 2, 4, 6, and 8.

Han's run:

distance (laps)	time (minutes)	minutes per lap
2	4	
4	9	
6	15	
8	23	

Clare's run:

distance (laps)	time (minutes)	minutes per lap
2	5	
4	10	
6	15	
8	20	

1. Is Han running at a constant pace? Is Clare? How do you know?
2. Write an equation for the relationship between distance and time for anyone who is running at a constant pace.