### Today, you will need: • calculator • pencil • notebook • glue • highlighter





#### Comparing Relationships with Tables

| CCSS Standards: Building on      | • <u>6.RP.A.3</u> |
|----------------------------------|-------------------|
| CCSS Standards: Addressing       | • 7.RP.A.2        |
| CCSS Standards: Building towards | • Z.RP.A.1        |





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#### Let's explore how proportional relationships are different from other relationships!



I can decide if a relationship represented by a <u>table</u> could be <u>proportional</u> and when it is definitely <u>not proportional</u>.

# Adjusting a Recipe



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



**Invent 4 new versions of this recipe:** 

- One that would make more lemonade but taste the same
- One that should make less lemonade but taste the same
- One that would have a stronger lemon taste
- One that would have a weaker lemon taste

### Visiting the State Park

#### Activity 1 5 Practices

Entrance to a state park costs \$6 per vehicle. Additionally, each visitor must pay \$2.

# What do you think the question is?

- → Begin with Quiet Work Time. (5 min.)
- $\rightarrow$  Let's discuss with a partner!



| # of people in vehicle | total entrance cost in dollars |
|------------------------|--------------------------------|
| 2                      |                                |
| 4                      |                                |
| 10                     |                                |

### Is this relationship proportional? Why or why not?

"Are you ready for more?"

What equation could you use to find the total entrance cost for a vehicle with any number of people?

# Running Laps

#### Activity 2 • Think, Pair, Share

# Begin working on your own. (5 min.)

Share your thinking as a team.



#### Is Han running at a constant pace? Is Clare?

| distance<br>(laps) | time<br>(minutes) | minutes<br>per lap |  |
|--------------------|-------------------|--------------------|--|
| 2                  | 4                 |                    |  |
| 4                  | 9                 |                    |  |
| 6                  | 15                |                    |  |
| 8                  | 23                |                    |  |

| distance<br>(laps) | time<br>(minutes) | minutes<br>per lap |  |
|--------------------|-------------------|--------------------|--|
| 2                  | 5                 |                    |  |
| 4 10               |                   |                    |  |
| 6 15               |                   |                    |  |
| 8 20               |                   |                    |  |

#### Can you represent either relationship with an equation?

| Han's run:         |                   | Clare's run        | Clare's run:       |                   |                    |  |
|--------------------|-------------------|--------------------|--------------------|-------------------|--------------------|--|
| distance<br>(laps) | time<br>(minutes) | minutes<br>per lap | distance<br>(laps) | time<br>(minutes) | minutes<br>per lap |  |
| 2                  | 4                 | 2                  | 2                  | 5                 | 2.5                |  |
| 4                  | 9                 | 2.25               | 4                  | 10                | 2.5                |  |
| 6                  | 15                | 2.5                | 6                  | 15                | 2.5                |  |
| 8                  | 23                | 2.875              | 8                  | 20                | 2.5                |  |

Are the pairs of values in the table for Clare's run still values of a proportional relationship if we calculate laps per minute instead of minutes per lap?

| - |   |    |   |           |      |
|---|---|----|---|-----------|------|
|   |   | re | S | <b>FU</b> | n.   |
| - | ŝ | -  | - |           | 1.1. |

| distance<br>(laps) | time<br>(minutes) | minutes<br>per lap |
|--------------------|-------------------|--------------------|
| 2                  | 5                 | 2.5                |
| 4                  | 10                | 2.5                |
| 6                  | 15                | 2.5                |
| 8                  | 20                | 2.5                |



I can decide if a
relationship represented by
a <u>table</u> could be
proportional and when it is
definitely not proportional.

# **Apples and Pizza**

