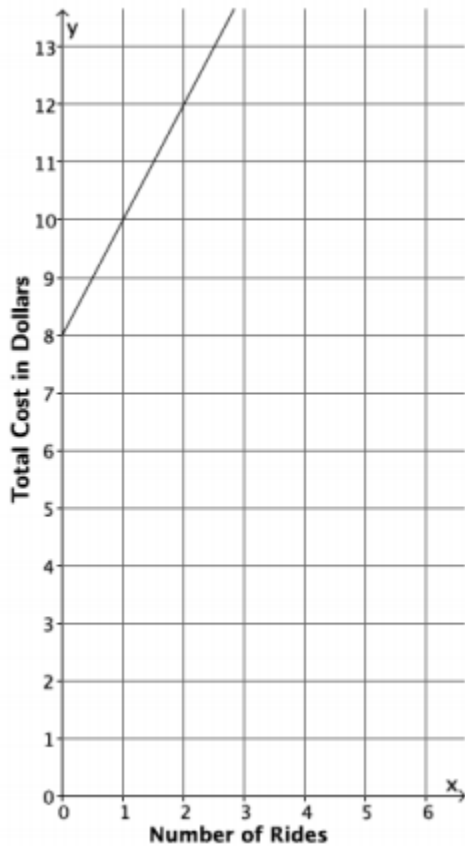Comparing Functions

The cost to enter and go on rides at a local water park, Wally's Water World, is shown in the graph below.

A new water park, Tony's Tidal Takeover, just opened. You have not heard anything specific about how much it costs to go to this park, but some of your friends have told you what they spent. The information is organized in the table below.

Number of Rides	2	5	7
Dollars Spent	13.50	15.75	17.25

Each park charges an admission fee and a fee per ride and each ride at each park costs the same amount.

1. How much does it cost to get into Wally's Water World?

2. How much does it cost per ride at Wally's Water World?

3. How much does it cost to get into Tony's Tidal Takeover?

4. How much does it cost per ride at Tony's Tidal Takeover?

a. If you only have $14 to spend, which park would you attend (assume the rides are the same quality)? Explain.

b. Another water park, Splash, opens, and they charge an admission fee of $30 with no additional fee for rides. At what number of rides does it become more expensive to go to Wally's Water World than Splash? At what number of rides does it become more expensive to go to Tony's Tidal Takeover than Splash?

c. For all three water parks, the cost is a function of the number of rides. Compare the functions for all three water parks in terms of their rate of change. Describe the impact it has on the total cost of attending each park.