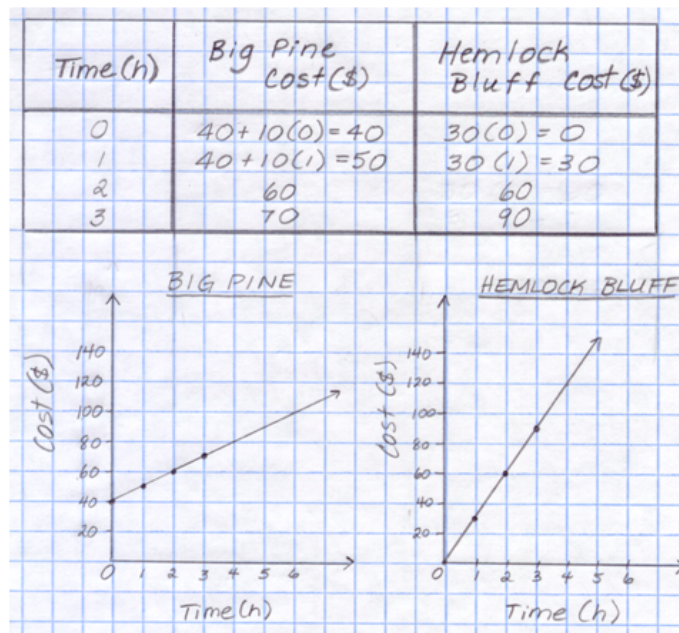


Choosing a Rental Company - The Outfitters Problem

Jaraad wants to rent a canoe for a day trip. He gathers this information from two places and decides to make a table of values and graph each of these relationships.

- Big Pine Outfitters charges a base fee of \$40 and \$10 per hour of use
- Hemlock Bluff Adventure Store does not charge a base fee, but charges \$30 per hour to use the canoe.

Jaraad's Working Sheet



- a) What is the cost of each canoe if Jaraad cancels his reservation?
 - b) Compare the rate of change of cost for Big Pine and for Hemlock Bluff.
2. Which graph illustrates a proportional relation? How do you know? This is called a _____ variation.
3. Which graph has an initial value other than zero? This is called a _____ variation.

4. Which outfitter company should Jaraad choose if he estimates he will canoe for 0.5 h?...1.5 h?...2.5 h?

Time (h)	Big Pine Cost (\$)	Hemlock Bluff Cost (\$)
0.5		
1.5		
2.5		

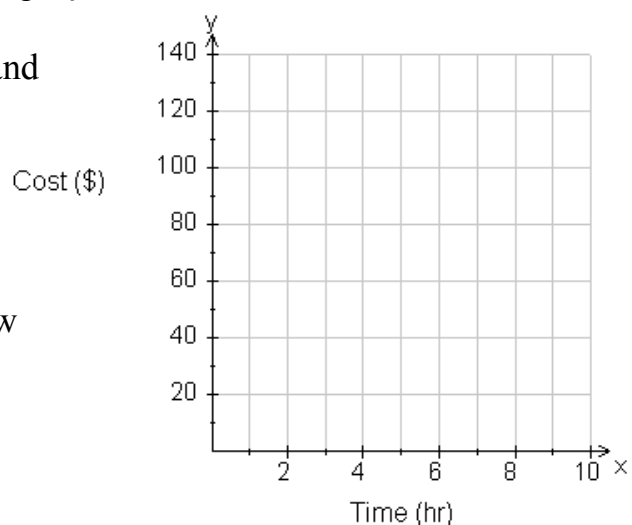
Explain how you determined your answers.

5. Write an equation to model the cost for each outfitter.
Let C represent the cost in dollars and h represent the time in hours.

Big Pine	$C =$
Hemlock Bluff	$C =$

6. If Big Pine Outfitters decided to change its base fee to \$50 and charge \$10 per hour, what effect would this have on the graph?

a) Draw a sketch of the original cost and show the changes on the same sketch.

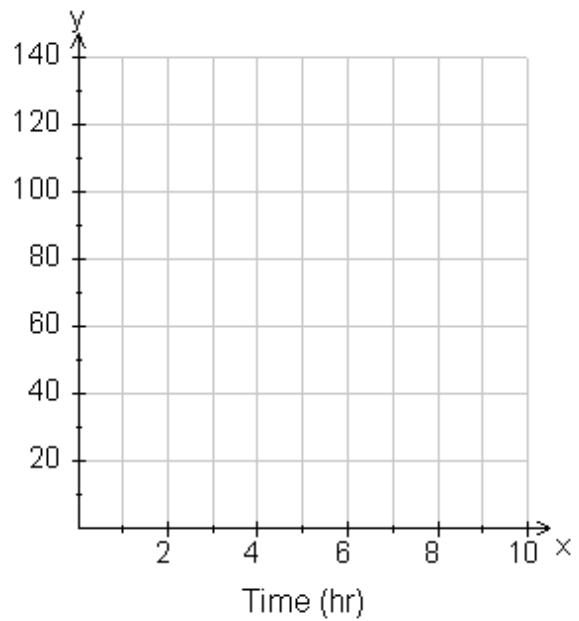


b) Write an equation to model the new cost.

7. If Hemlock Bluff Adventure Store decided to change its hourly rate to \$40, what effect would this have on the graph?

a) Draw a sketch of the original cost and show the changes on the same sketch.

Cost (\$)



b) Write an equation to model the new cost.

8. For Big Pine Outfitters, how are the pattern in the table of values, the description, the graph, and the equation related?

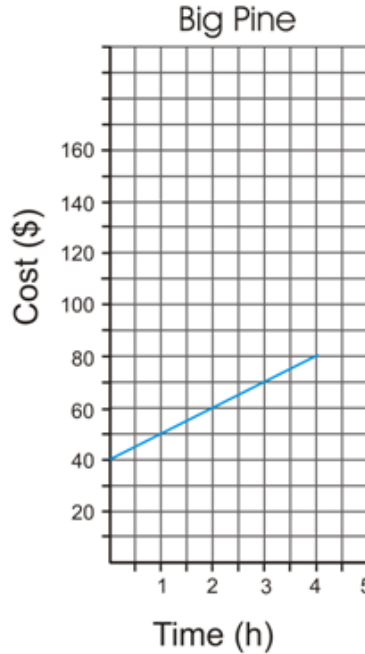
Description

Big Pine Outfitters charges a base fee of \$40 to deliver the canoe to the launch site and \$10 per hour of use.

Table of Values

Time (h)	Cost (\$)
0	
1	
2	
3	
4	

Graph



Equation

$C =$

9. For Hemlock Bluff, how are the pattern in the table of values, the description, the graph, and the equation related?

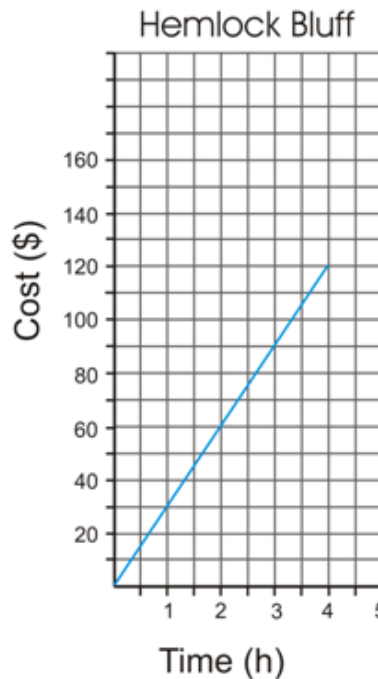
Description

Hemlock Bluff charges \$30 per hour.

Table of Values

Time (h)	Cost (\$)
0	
1	
2	
3	
4	

Graph



Equation

$C =$