

Performance Task: 8.5F  
*Proportional & Non-Proportional Relationships: Beach Rentals*

The Jameson family of 5 and the Maritz family of 4 are spending the day at the beach. There they find a vendor renting some items they might need for the day.



The Jameson's decide to get chairs for each person in their family and to share 3 umbrellas with each other for their day on the beach. The Maritz family also gets chairs for each person as well as 2 umbrellas to share. The Maritz family also rents the sandcastle tools for the day.

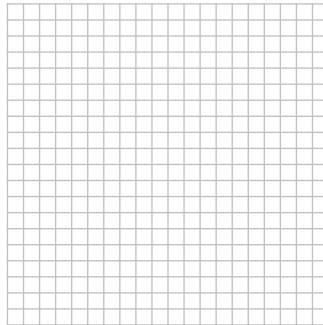
1. How much does the Jameson family spend on renting chairs per hour? How much does the Jameson family spend on renting umbrellas per hour?
2. How much does the Jameson family spend each hour for all their equipment?
3. Complete the table below to show the rental costs for the Jameson family based on the hours spent at the beach.

Hours spent at beach, $h$	1	2	3	4	5	10
Process						
Rental cost, $c$						

4. Write an equation to represent the Jameson's rental cost based on any number of hours spent at the beach.



5. Represent the Jameson’s rental costs based on the number of hours spent at the beach on the graph provided. Label the graph appropriately and note the x- and y-axis values and scale used.



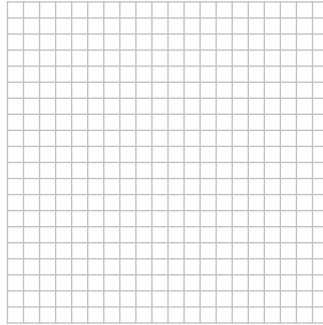
6. Is the Jameson family’s rental situation proportional? Justify your reasoning.
7. How much does the Maritz family spend on renting chairs per hour? How much does the Maritz family spend on renting umbrellas per hour?
8. How much does the Maritz family spend each hour for all their equipment?
9. What other charges do the Maritz’s have and how is it calculated?
10. Complete the table below to show the rental costs for the Maritz family based on the hours spent at the beach.

Hours spent at beach, $h$	1	2	3	4	5	10
Process						
Rental cost, $c$						

11. Write an equation to represent the Maritz’s rental cost based on any number of hours spent at the beach.



- 12. Represent the Maritz's rental costs based on the number of hours spent at the beach on the graph provided. Label the graph appropriately and note the x- and y-axis values and scale used.



- 13. Is the Maritz family's rental situation proportional? Justify your reasoning.

- 14. At how many hours would the two families' costs be the same?

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