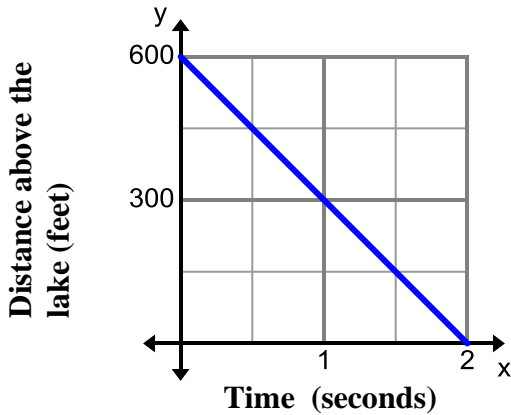


Score: _____ / _____ %

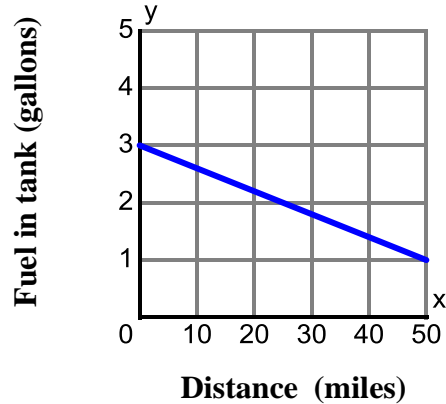
HW 2-2: Constant Rate of Change

Find the rate of change for each situation (Answers must include units). Determine whether the relationship is proportional and explain your reasoning.

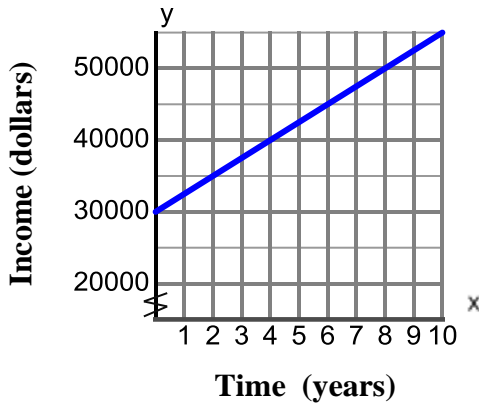
1. A Peregrine Falcon diving for a fish.



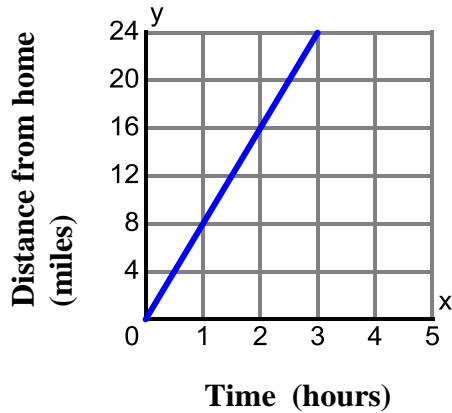
4. The amount of fuel remaining while traveling.



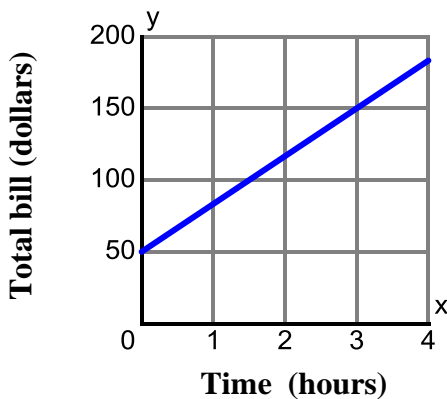
2. The income for a certain profession over time.



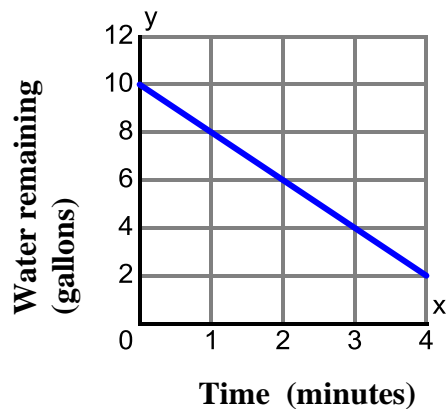
5. Your distance from home as you ride your bike.



3. The amount you owe a plumber.



6. A swimming pool draining.



Find the rate of change for each situation (Answers must include units). Determine whether the relationship is proportional and explain your reasoning.

7. Cost of using a computer at an Internet Café.

Time (hours)	2	4	6
Cost (dollars)	7	14	21

10. Calories burned.

Time (minutes)	40	60	80
Calories burned	500	750	1000

8. Cost of renting a movie.

Time (days)	Total Cost (dollars)
4	6.00
5	8.25
6	10.50
7	12.75

11. Cost of text messages.

Number of Texts	Cost
300	12.50
350	20.00
380	24.50
450	35.00
550	50.00

9. Amount of time at an amusement park and admission fee.

Time (hours)	4	5	6
Admission Fees (dollars)	34.99	34.99	34.99

Find the rate of change for each situation (Answers must include units). Determine whether the relationship is proportional and explain your reasoning.

12. After traveling for 4 hours, Michael was 280 miles from home. He had traveled 420 miles after 6 hours from the time he started traveling. What is his rate of change?
13. Josh started out with \$15.50. After working for 3 hours, he had \$32.00. How much did Josh receive per hour?
14. At noon, there was 3 inches of snow. At 2:00 pm, there was 9 inches of snow. What is the rate of snowfall?
15. Kevin lives 3 miles away from the trail head. Starting from the trail head, it takes him 2 hours to get to the lake which is 11 miles from his house. Find his rate of change.