



time hrs	0	0.5	1	1.5	2	2.5	3	3
alcohol mg	65	55	47	40	34	29	25	2

qu (3)

2.

For this problem refer to the graph of $y = g(t)$ labeled qu(2) on the left. Find

- (a) The average rate of change of $g(t)$ between $t = 0$ and $t = 2$.
- (b) The average rate of change of $g(t)$ between $t = 0$ and $t = 1$.
- (c) The average rate of change of $g(t)$ between $t = 0$ and $t = 0.5$.

24. A tourist travels 1500 miles using two planes. The second plane averages 50 miles per hour faster than the first plane. The tourist uses the slower plane for the first 500 and the faster plane for the next 1000 miles. The total flying time is 6.5 hours. What is the speed of the first plane?

25. It takes George 1 hour longer to mow the lawn than it takes Henry. Working together, using two mowers, they can mow the lawn in 1 hour and 12 minutes. How long would it take Henry to mow the lawn by himself? [hint: Let x be the time taken by George. How much of the lawn does George mow in 1 hour? How much does Henry do in 1 hour? How much do they mow together in 1 hour?]

33. There are 3 beakers each of which contains saline solution. Beaker A initially contains 3 liters of 15% salt solution. Beaker B initially contains 2 liters of 30% salt solution. Beaker C initially contains 4 liters of 0% salt solution. Two liters are transferred from A to B and the result is thoroughly mixed. Then one liter is transferred from B to C and the result mixed. Finally two liters are transferred from C back to A. What is the percentage concentration of salt in A after all this?