

Mel Cheek is a fishing guide on the Chenega River. The fish are usually found 20 to 50 miles upriver. Once the fish are located, Mel slows the boat to trolling speed and fishes for about 6 hours before returning to dock. Mel has noted that overall fuel costs vary based on "miles upriver" and he is considering changing his guide fee to separately charge customers for estimated fuel costs. Below is Mel's log for 15 typical days showing "miles upriver to locate fish" and "total fuel cost".

Day	Miles Upriver	Fuel Cost
1	37	\$86
2	41	93
3	22	73
4	28	80
5	49	99
6	25	74
7	33	85
8	37	87
9	44	93
10	24	77
11	29	80
12	45	96
13	35	83
14	36	87
15	31	80
Total	<u>516</u>	<u>\$1,273</u>

- Use the high-low method to determine the "fixed fuel cost" associated with the trolling time, and the "variable fuel cost" associated with running up and down the river.
- If the sole objective of the fuel charge is to approximately recover actual costs incurred each day, would "\$2.50 per mile upriver" be a fair formula? What alternative formula might you suggest?