



[Course](#) > [Week 4...](#) > [Lesson...](#) > QQ6

## QQ6

### QQ6

0 points possible (ungraded)

Which of the following statements are true concerning the Vehicle Routing Problem (VRP)?  
(You may check more than one choice)

- ☐ a) For a given set of nodes, the VRP solution will always be better than the TSP solution
- ☒ b) Cluster First, Route Second is a VRP heuristic
- ☒ c) Route First, Cluster Second is a VRP heuristic
- ☒ d) In Cluster First, Route Second heuristics, the TSP is solved in the second step ✓
- ☐ e) If  $N$  is the number of demand nodes in the network, then no more than  $N/2$  vehicles can be used.



### Explanation

The correct answer is d.

- a) False. At best, they will be equal if there is only one vehicle. Having two or more vehicles will obviously increase the total tour length of the VRP over the TSP solution that assumes a single vehicle.
- b) False. No, this is a class or basic approach of several heuristics - it is not a heuristic itself.
- c) False. No, this is a class or basic approach of several heuristics - it is not a heuristic itself.
- d) True. Once clustered, a TSP solution is found for each vehicle tour.
- e) False. I just made this up. It is nonsense.

Submit

You have used 3 of 3 attempts

**i** Answers are displayed within the problem

Questions, comments and suggestions about this section

If you have any questions, comments or suggestions about this section, please use the "Add a Post" button in the discussion forum below. Your post will be indexed in the right category and it will be easier for the staff to answer it!

If you have a question, classify your post as a "question" (instead of "discussion"), since we try to review those post first.

Discussion

Hide Discussion

Topic: Week 4 / Lesson 1, Quick Question 6

Add a Post

Show all posts ▼		by recent activity ▼	
?	<u>"Cluster First, Route Second is a VRP heuristic" or Not?</u> <u>Option b) states "Cluster First, Route Second is a VRP heuristic" And the answer explains: b) False. No, thi...</u>	1	▼
💬	<u>Doubt about Part A</u> <u>How VRP solution is better that TSP?</u>	2	▼