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QQ3

QQ3

0 points possible (ungraded)

Which of the following arcs if added to the network would change the shortest path from SL to WA? (You may check more than one choice)

☐ a) CN-WA 367 miles

☒ b) LX-GR 225 miles ✓

☐ c) SL-CL 500 miles

☒ d) CO-CN 100 miles ✓



Explanation

The correct answers are b and d.

a) False - $526 + 367 = 893 >$ current SP distance of 892. It would have updated the WA node initially, but it would be overwritten later when node MT was searched.

b) True. This changes the path to SL-LV-LX-GR-RI-WA. The $L(GR) = 349 + 225 = 574$, $L(RI) = 779$, $L(WA) = 890$.

c) False. This changes the path to CL so that $L(CL) = 500$, $L(HB) = 832$. But, $500 + 201 = 701$ which is greater than the current $L(MT)$ - so it would not change the path.

d) True. This changes CN to be (521, CO), MT becomes (678, CN), and WA (887, MT). The shortest path is SL-IN-CO-CN-MT-WA.

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You have used 3 of 3 attempts

 Answers are displayed within the problem

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? [Correct answer](#)

Hello all, As the shortest path is indeed SL-IN-CO-CN-MT-WA, shouldn't option "d" be the only right answ...

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