

Cupid's Route Distance Chart

Name: _____

Date: _____

Score: _____

Cities	Roma	Ephe.	Carth.	Alex.	Byzan.	Medio.	Thes.	Lond.	Ant.	Leptis.	Ital.	Napo.
1. Roma	miles	833	367	1,215	856	296	550	892	1,326	649	1,032	644
2. Ephesus	833	miles	937	489	229	1,069	300	1,629	502	822	1,819	640
3. Carthago	367	937	miles	1,186	1,041	598	728	1,135	1,432	369	903	967
4. Alexandria	1,215	489	1,186	miles	681	1,489	761	2,073	498	922	2,086	1,128
5. Byzantium	856	229	1,041	681	miles	1,041	317	1,556	511	996	1,881	480
6. Mediolanum	296	1,069	598	1,489	1,041	miles	770	597	1,541	929	963	697
7. Thessalonica	550	300	728	761	317	770	miles	1,329	779	732	1,566	426
8. Londinium	892	1,629	1,135	2,073	1,556	597	1,329	miles	2,067	1,495	1,015	1,118
9. Antiochia	1,326	502	1,432	498	511	1,541	779	2,067	miles	1,269	2,319	976
10. Leptis Magna	649	822	369	922	996	929	732	1,495	1,269	miles	1,196	1,095
11. Italica	1,032	1,819	903	2,086	1,881	963	1,566	1,015	2,319	1,196	miles	1,641
12. Napoca	644	640	967	1,128	480	697	426	1,118	976	1,095	1,641	miles

To find a distance from one city to another, find where the row of the first city intersects the column of the second city or vice-versa. Each pair of cities can be found twice on the chart.

For example, to find the distance from Antiochia to Carthago, find Antiochia's row and follow it to the right until it intersects Carthago's column. You could also start with Carthago's row and follow it until it intersects with Antiochia's column. The distance from Antiochia to Carthago is highlighted in light red in the chart in both places it can be found.

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Cupid's Route Map

Name: _____

Date: _____

Score: _____



Source: [Wikimedia Commons](#), Public Domain

[View the Google My Maps version to complete this activity online.](#)

If you have a Google account, you can copy the Google Map into your account then draw in a route using the draw a line tool.

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Cupid's Route Answers

Name: _____

Date: _____

Score: _____



*It is the year 117 C.E. and Cupid has to visit 12 cities in the Roman Empire to help people fall in love with his golden arrow. Cupid has wings, so he can fly straight from one city to the next, but this is tiring, so he would like the shortest route possible. Use the distance chart and the map to help you answer the following questions. **Note to teachers: This is an open-ended activity where the goal isn't necessarily to get the best answer (as shown on this answer key), but to use mathematical thinking in the process of finding an answer and perhaps improving on it.***

1. Cupid was thinking of starting in Roma and returning there after. What is the shortest route you can find for him that starts in Roma, visits all the other cities on the list once, and returns to Roma at the end?

The shortest route is: Roma -> Mediolanum -> Londinium -> Italica -> Carthago -> Leptis Magna -> Alexandria -> Antiochia -> Byzantium -> Ephesus -> Thessalonica -> Napoca -> Roma (or the reverse direction), a total of 6,710 miles.

[Google My Maps Answer to Question 1](#)

2. Cupid just remembered he'll be in Londinium at the start, but he still wants to end in Roma. What is the shortest route you can find for him that starts in Londinium and visits all the other cities once with the last city being Roma?

The shortest route is: Londinium -> Italica -> Carthago -> Leptis Magna -> Thessalonica -> Ephesus -> Alexandria -> Antiochia -> Byzantium -> Napoca -> Mediolanum -> Roma, a total of 6,290 miles.

[Google My Maps Answer to Question 2](#)

3. What is the shortest route that you can find that takes Cupid to each city once? You choose the start and end cities.

The shortest possible route is: Antiochia -> Alexandria -> Ephesus -> Byzantium -> Napoca -> Thessalonica -> Leptis Magna -> Carthago -> Roma -> Mediolanum -> Londinium -> Italica (or the reverse), a total of 5,498 miles.

[Google My Maps Answer to Question 3](#)

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