

Cupid's Route Distance Chart

Name: _____

Date: _____

Score: _____

Cities	Roma	Ephe.	Carth.	Alex.	Byzan.	Medio.	Thes.	Lond.	Ant.	Leptis.	Ital.	Napo.
1. Roma	km	1,340	591	1,955	1,377	477	885	1,435	2,134	1,044	1,660	1,037
2. Ephesus	1,340	km	1,507	787	369	1,720	483	2,621	807	1,323	2,926	1,029
3. Carthago	591	1,507	km	1,909	1,675	962	1,171	1,827	2,304	594	1,453	1,556
4. Alexandria	1,955	787	1,909	km	1,095	2,395	1,224	3,336	802	1,484	3,357	1,815
5. Byzantium	1,377	369	1,675	1,095	km	1,675	510	2,504	822	1,603	3,026	772
6. Mediolanum	477	1,720	962	2,395	1,675	km	1,239	960	2,479	1,494	1,549	1,122
7. Thessalonica	885	483	1,171	1,224	510	1,239	km	2,139	1,253	1,178	2,520	685
8. Londinium	1,435	2,621	1,827	3,336	2,504	960	2,139	km	3,326	2,405	1,633	1,799
9. Antiochia	2,134	807	2,304	802	822	2,479	1,253	3,326	km	2,042	3,732	1,571
10. Leptis Magna	1,044	1,323	594	1,484	1,603	1,494	1,178	2,405	2,042	km	1,925	1,762
11. Italica	1,660	2,926	1,453	3,357	3,026	1,549	2,520	1,633	3,732	1,925	km	2,641
12. Napoca	1,037	1,029	1,556	1,815	772	1,122	685	1,799	1,571	1,762	2,641	km

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 10,799 km.

[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 10,123 km.

[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 8,848 km.

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

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