

Santa's Route

Name: _____

Date: _____

Score: _____



Use the distance chart and the map to help you answer the following questions.

1. Santa Claus is in Cairo and still has eleven cities to go before he can give his reindeer a break. The reindeer are already tired, so Santa wants to find the shortest route to follow starting at Cairo and stopping at all the other cities. It doesn't matter which city is the final stop. Use the chart and map to help Santa find the shortest route. What is the distance you found?

2. What is the shortest route and the distance if Santa starts in Warsaw?

3. Can you find another route that is even shorter if Santa starts in a different city? What route and distance did you find?

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Santa's Route Distance Chart

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Cities	Cairo	Kolkata	Chicago	Lisbon	London	Manila	Moscow	Paris	Rome	Sydney	Tokyo	Warsaw
1. Cairo	km	5,694	9,862	3,802	3,509	9,178	2,901	3,210	2,124	14,404	9,549	2,623
2. Kolkata	5,694	km	12,840	9,072	7,960	3,545	5,343	7,857	7,212	9,147	5,139	6,513
3. Chicago	9,862	12,840	km	6,420	6,356	13,102	8,003	6,652	7,736	14,919	10,135	7,509
4. Lisbon	3,802	9,072	6,420	km	1,585	12,142	3,905	1,455	1,868	18,185	11,126	2,759
5. London	3,509	7,960	6,356	1,585	km	10,735	2,502	343	1,427	16,997	9,557	1,446
6. Manila	9,178	3,545	13,102	12,142	10,735	km	8,256	10,743	10,389	6,346	3,002	9,392
7. Moscow	2,901	5,343	8,003	3,905	2,502	8,256	km	2,484	2,372	14,500	7,477	1,150
8. Paris	3,210	7,857	6,652	1,455	343	10,743	2,484	km	1,121	16,965	9,709	1,366
9. Rome	2,124	7,212	7,736	1,868	1,427	10,389	2,372	1,121	km	16,309	9,871	1,315
10. Sydney	14,404	9,147	14,919	18,185	16,997	6,346	14,500	16,965	16,309	km	7,829	15,601
11. Tokyo	9,549	5,139	10,135	11,126	9,557	3,002	7,477	9,709	9,871	7,829	km	8,446
12. Warsaw	2,623	6,513	7,509	2,759	1,446	9,392	1,150	1,366	1,315	15,601	8,446	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 Rome to Chicago, find Rome's row and follow it to the right until it intersects Chicago's column. You could also start with Chicago's row and follow it until it intersects with Rome's column. The distance from Rome to Chicago is highlighted in light red in the chart in both places it can be found.

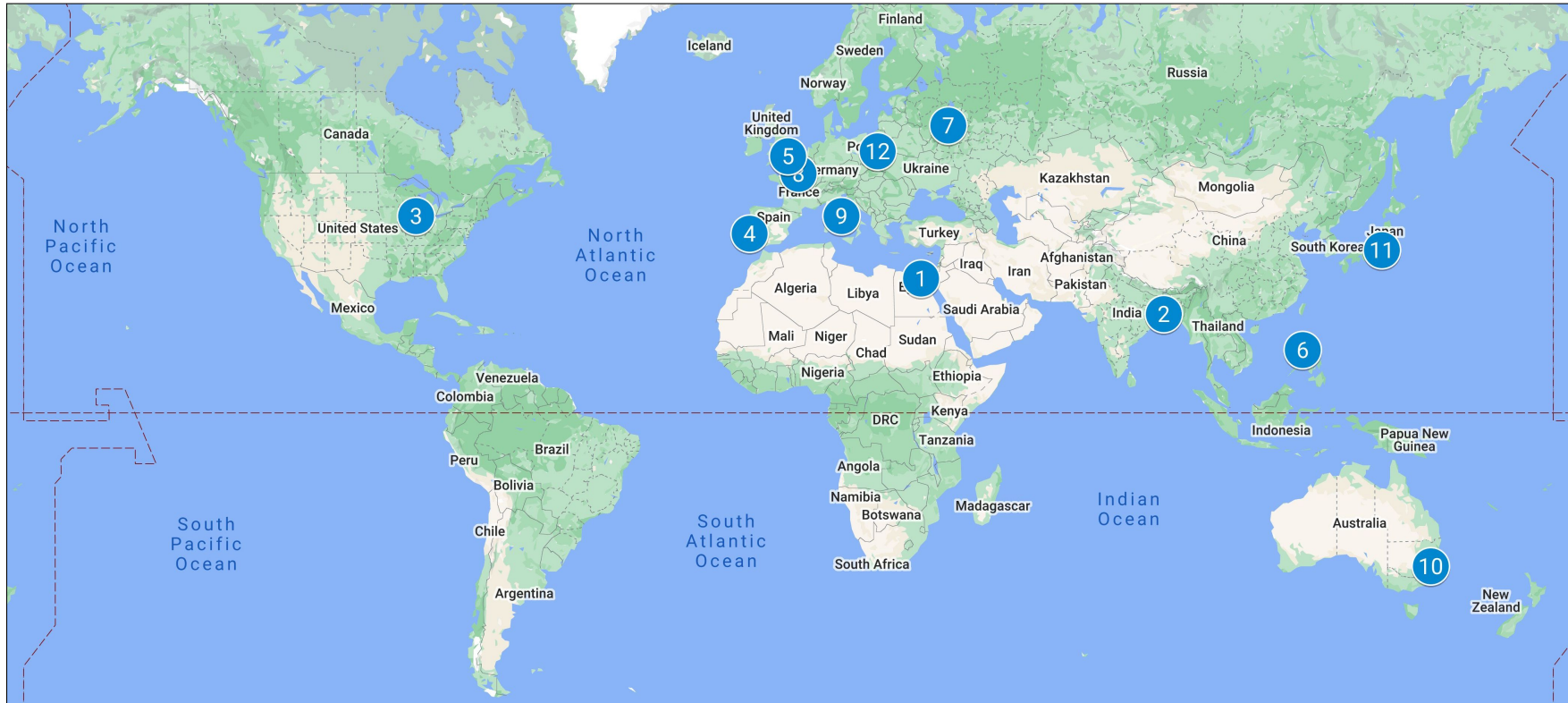
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Santa's Route Map

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Source: Google My Maps, Map data ©2021 Google

[View this map on Google My Maps](#)

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

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Santa's Route Answers

Name: _____

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Score: _____

Use the distance chart and the map to help you answer the following questions.

1. Santa Claus is in Cairo and still has eleven cities to go before he can give his reindeer a break. The reindeer are already tired, so Santa wants to find the shortest route to follow starting at Cairo and stopping at all the other cities. It doesn't matter which city is the final stop. Use the chart and map to help Santa find the shortest route. What is the distance you found?

The shortest route is: Cairo, Moscow, Warsaw, Rome, Paris, London, Lisbon, Chicago, Tokyo, Kolkata, Manila, Sydney, a total of 40,000 km.

[Google My Maps Answer](#)

2. What is the shortest route and the distance if Santa starts in Warsaw?

The shortest route is: Warsaw, Moscow, Chicago, Lisbon, London, Paris, Rome, Cairo, Kolkata, Manila, Tokyo, Sydney, a total of 40,816 km.

[Google My Maps Answer](#)

3. Can you find another route that is even shorter if Santa starts in a different city? What route and distance did you find?

The shortest route is: Chicago, Lisbon, London, Paris, Rome, Warsaw, Moscow, Cairo, Kolkata, Manila, Tokyo, Sydney or the reverse direction, a total of 34,905 km.

[Google My Maps Answer](#)

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