RIGAS 64.VIDUSSKOLA

Erasmus+

epcg

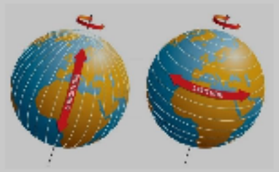
MATHEMATICS TASK

Geographical Sciences

Its purpose is the study of the surface and the spatial distribution of landscape phenomena in the landscape.

Geographic Coordinates

They serve to identify the location of any point on the earth's surface; It is the location of a place on the earth's surface.



Latitude

It is the angular distance from the Equator to the parallel of the place.

Longitude

It is the angular distance from the Greenwich semi-meridian to the place meridian.

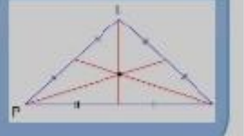
Situation

At the meeting in Riga, Bulgaria proposes that the next meeting should take place at the center of the triangle whose vertices are the geographical coordinates of the countries Latvia, Portugal and Turkey.

Portugal, on the other hand, says that it would be geographically more balanced if the next meeting takes place in Rome, Italy.

Remember that:

the centroid of the triangle is the triangle's center of gravity, the point of intersection of the 3 medians.



Objective: Use the CalcMaps, GeoGebra and GoogleMaps tools to verify the proposed situations and present a conclusion.

Procedure:

1 – Start by identifying the geographic coordinates of each location using the CalcMaps Coordinates tool;

2 – In Geogebra:

a) mark the points corresponding to the obtained coordinates;

b) define the vertex triangle LtPtTr

c) determine the midpoints and draw the medians of the sides of the triangle;

d) determine the coordinates of the intersection point of the medians - the centroid;

3 – Using Google Maps, determine the location of the point obtained;

4 – Returning to CalcMaps, in Distance, mark the points corresponding to the six location.

Conclusion:

Observe the figure obtained and comment on the situation presented initially.

Team 1

Melih, Filipe, Azra, Leticjia, Laise

Places	(x , y)
Riga, Latvia	56.94728,24.11546
Kardzhali, Bulgaria	41.63880,25.37547
Lisbon, Portugal	38.73577,-9.12191
Samsun, Turkey	41.28181,36.33577
Montenero di Bisaccia, Italy	41.95530,14.78308



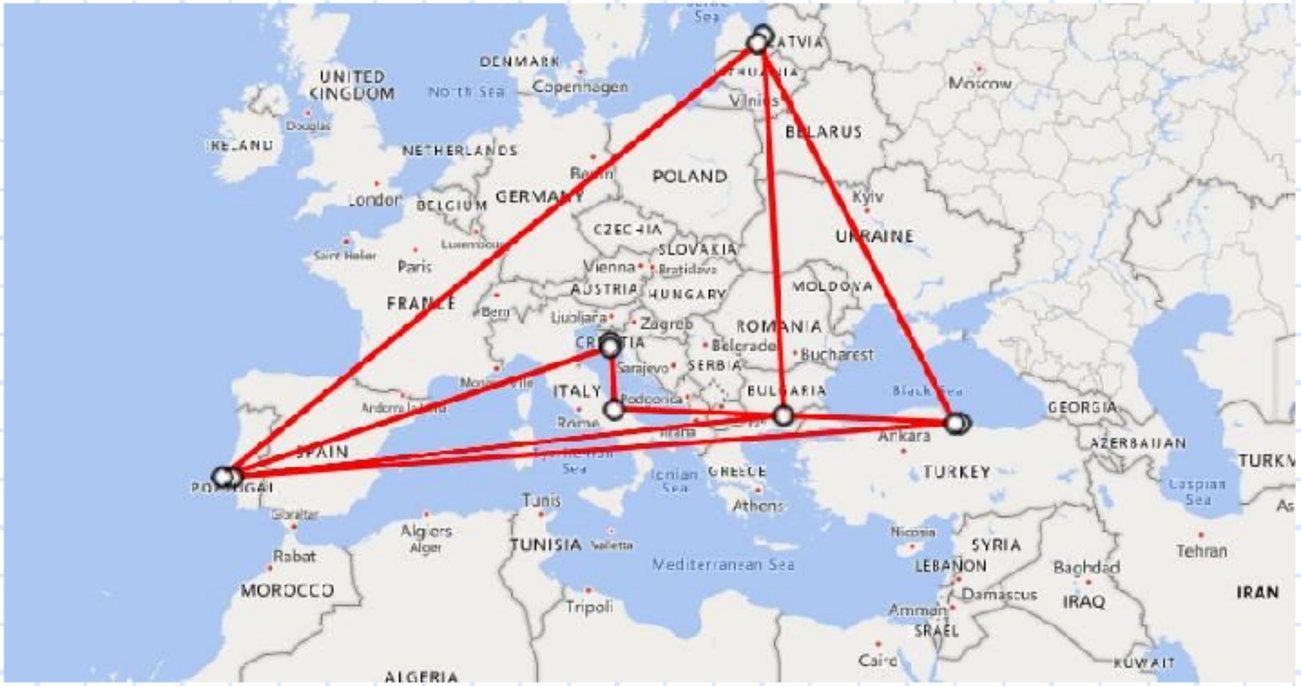
Portugal - Italy
Bulgaria - Croatia

Portugal chose Italy only because of the distance difference

Team 2

Gabriela, Esra,
Ece, Ines, Eftelia

Places	(x , y)
Riga, Latvia	56.9, 24.1
Kardzhali, Bulgaria	41.6, 25.4
Lisbon, Portugal	38.7, -9.1
Samsun, Turkey	41.2, 36.3
Montenero di Bisaccia, Italy	41.9, 14.8



Portugal chose Italy because it is closer to them than the place that Bulgaria chose - Croatia.

Team3

!!!clčk to frozen 2 watch free!!! □□□

the triangle: https://ibb.co/j333XB2

picture of the intersection point: https://ibb.co/fF0bK50

Silvia Correia - Portugal

Kristaps Ābols - Latvia

Taha Biyiksiz - Turkey

Efe Kaan ``Cevdet`` Altash - Turkey

Places	(x , y)
Riga, Latvia	56, 24
Kardzhali, Bulgaria	41, 25
Lisbon, Portugal	38, -9
Samsun, Turkey	41, 36
Montenero di Bisaccia, Italy	42, 14

Rome is close to the intersection point and the students in Italy won't need to move outside of their country. That's why Portugal has chosen Rome as the next meeting point.

intersection point: 45.3,17 / 44330, Stari Grabovac, Croatia

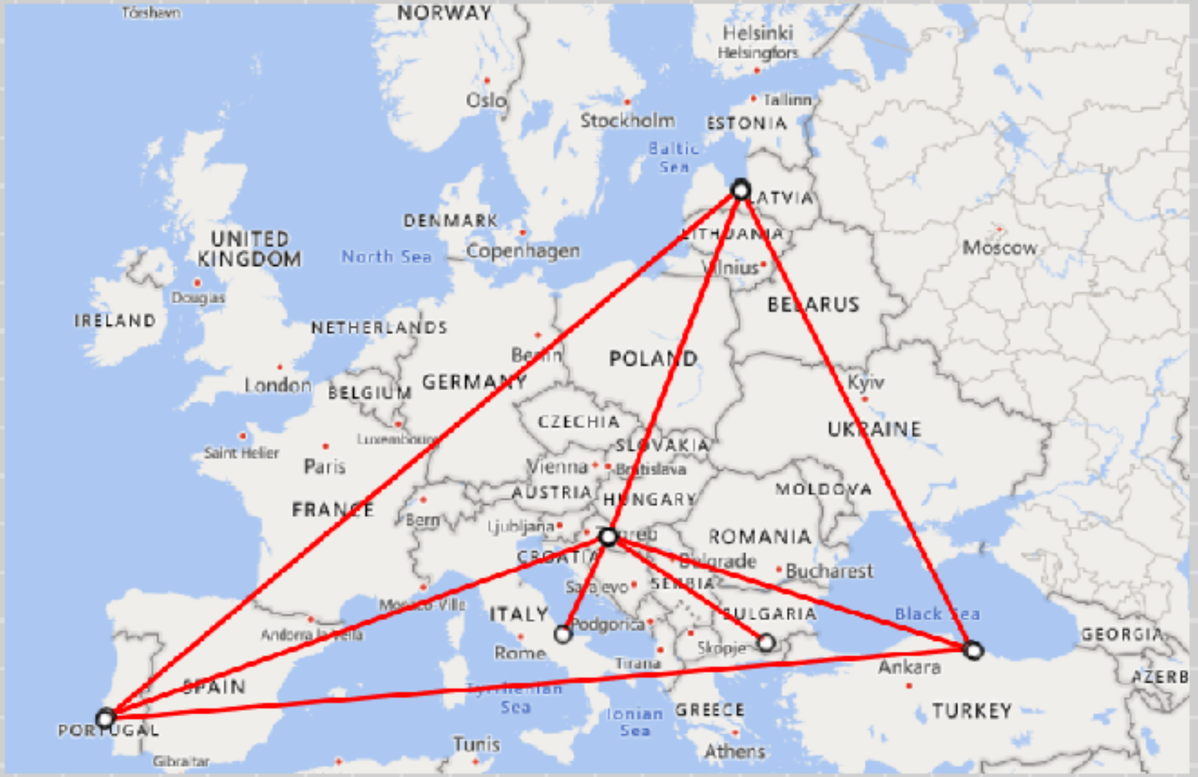
Team 4

Adem - Turkiye
Markuss - Latvia
Recio - Portugal
Yusein - Bulgaria
Busra - Turkiye

meeting coordinates that bulgaria suggested:
45.6471, 17.1023



Places	(x , y)
Riga, Latvia	56.94616,24.10436
Kardzhali, Bulgaria	41.64282,25.36919
Lisbon, Portugal	38.70646,-9.13657
Samsun, Turkey	41.28869,36.33912
Montenero di Bisaccia, Italy	41.95699,14.78120



The location Bulgaria suggested is closer to them but the location Portugal suggested is closer to them.

The intersection point is not good because it is very close to some countries but not to other Erasmus partners.

Places	(x , y)
Riga, Latvia	
Kardzhali, Bulgaria	
Lisbon, Portugal	
Samsun, Turkey	
Montenero di Bisaccia, Italy	

Procedure:

1 – Start by identifying the geographic coordinates of each location using the CalcMaps Coordinates tool;

2 – In Geogebra:

a) mark the points corresponding to the obtained coordinates;

b) define the vertex triangle LtPtTr

c) determine the midpoints and draw the medians of the sides of the triangle;

d) determine the coordinates of the intersection point of the medians - the centroid;

3 – Using Google Maps, determine the location of the point obtained;

4 – Returning to CalcMaps, in Distance, mark the points corresponding to the six location.

Conclusion:

Observe the figure obtained and comment on the situation presented initially.

Team 6

Places	(x , y)
Riga, Latvia	
Kardzhali, Bulgaria	
Lisbon, Portugal	
Samsun, Turkey	
Montenero di Bisaccia, Italy	

Procedure:

1 – Start by identifying the geographic coordinates of each location using the CalcMaps Coordinates tool;

2 – In Geogebra:

a) mark the points corresponding to the obtained coordinates;

b) define the vertex triangle LtPtTr

c) determine the midpoints and draw the medians of the sides of the triangle;

d) determine the coordinates of the intersection point of the medians - the centroid;

3 – Using Google Maps, determine the location of the point obtained;

4 – Returning to CalcMaps, in Distance, mark the points corresponding to the six location.

Conclusion:

Observe the figure obtained and comment on the situation presented initially.