



Homework task _ MYP 4

Unit 1: travelling through space and time

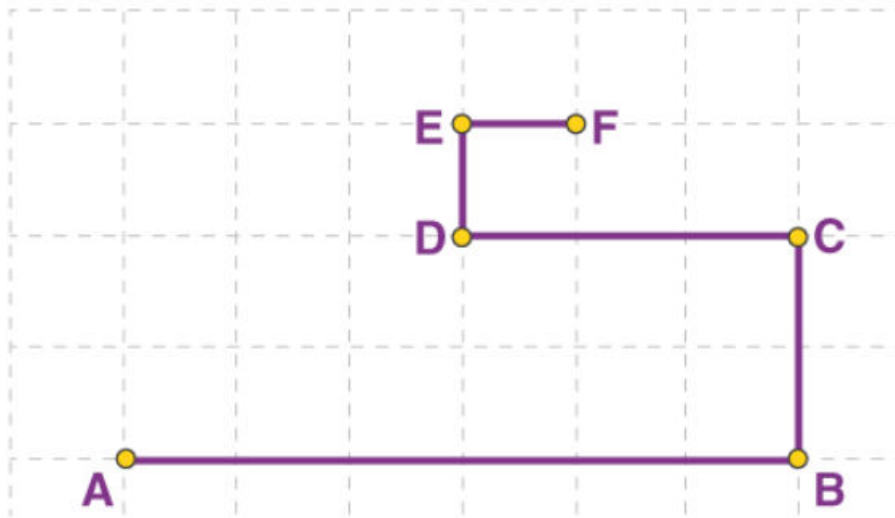
Topic: Distance and displacement

The following questions are to be solved in the notebook.

Question 1. John travels 250 miles to North but then back-tracks to South for 105 miles to pick up a friend. What is John's total displacement?

Question 2. An object moves along the grid through points A, B, C, D, E, and F as shown below. The side of square tiles measures 0.5 km.

- Calculate the distance covered by the moving object.
- Find the magnitude of the displacement of the object.



3. Compare and contrast between distance and displacement?

5. A person travels a distance of 5 m towards east, then 4 m towards north and then 2 m towards west.

(i) Calculate the total distance travelled.

(ii) Calculate the resultant displacement.

6. A body is moving in a straight line. Its distances from origin are shown with time in Fig. A, B, C, D and E represent different parts of its motion. Find the following :

(i) Displacement of the body in first 2 seconds.

(ii) Total distance travelled in 7 seconds.

(iii) Displacement in 7 seconds

