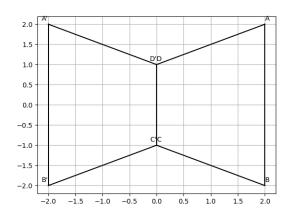
Assignment I (ICSE Class 10 2018)

Gautam Singh (CS21BTECH11018)

- 5. c. Use graph paper for this question (Take 2cm = 1 unit along both x and y axis). ABCD is a quadrilateral whose vertices are A(2,2), B(2,-2), C(0,-1) and D(0,1).
 - (i) Reflect quadrilateral ABCD on the *y*-axis and name it as A'B'CD.
 - (ii) Write down the coordinates of A' and B'.
 - (iii) Name two points which are invariant under the above reflection.
 - (iv) Name the polygon A'B'CD.

Solution:

(i) The plot of quadrilateral ABCD after reflection on the *y*-axis is as shown:



- (ii) The coordinates of A' and B' are (-2,2) and (-2,-2) respectively.
- (iii) The two points which are invariant under reflection are C(0,-1) and D(0,1).
- (iv) The polygon A'B'CD is an isosceles trapezium.