

Get the right cards !

Objective covered :

Dealing with quadratic functions :

- Key points of the parabolas : roots, vertex, y-intercept, axis of symmetry
- Different forms of a quadratic expression

Aim :

To practise the vocabulary on quadratic functions.

To be able to ask each other relevant questions specific to descriptions of second degree functions and graphs.

To practise the different forms - expanded, factorized and standard - of a quadratic expression.

Resources :

A set of graphs + a set of cards with different pieces of informations about the graphs. *See attached files.*

Activity :

Explain to the class that each student will be given the graph of a parabola plus different cards with details on other students' parabolas.

They keep their graphs and cards hidden from the other students

At the end of the game they must have collected the 5 cards related to their own graph of parabola :

1/ Number and values of the roots (if any!)

2/ The axis of symmetry

3/ The coordinates of the vertex

4/ The y-intercept

5/ One algebraic formula of the quadratic function

To do so, they must stand up and ask questions to the other students :

eg « *Do you have any root card ?* »,

« *What do you have as vertex coordinates ?* ».....

When they've got all their cards, they 'll go to the board and write on it all the collected details on their parabola.

Then they'll have to find out and write on the board all the different algebraic forms of their quadratic function.

General assessment of the results by the group