

Graphing Quadratics

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

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Learning Objectives



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We will learn about,



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▶ Quadratic polynomials



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- ▶ Axis of symmetry, directrix, vertex and intercepts of a parabola



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- ▶ Quadratic polynomials
- ▶ Axis of symmetry, directrix, vertex and intercepts of a parabola
- ▶ How to graph quadratic equations in two variables



System Requirement



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- ▶ **Windows 10 (64-bit) operating system**



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- ▶ **Chrome version 101.0.49**



Prerequisites



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- ▶ **Learner should be familiar with topics in basic mathematics**



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- ▶ Please use the link below to access the tutorials on PhET Simulations
<https://spoken-tutorial.org>



Link for PhET Simulation

- ▶ Please use the given link to download the PhET simulation
<https://phet.colorado.edu/en/simulations/graphing-quadratics>



PhET Simulations



PhET Simulations

In this tutorial we will use,



PhET Simulations

In this tutorial we will use,

- ▶ **Graphing Quadratics PhET simulation**



Summary

We have learnt about:

- ▶ Quadratic polynomials
- ▶ Axis of symmetry, directrix, vertex and intercepts of a parabola
- ▶ How to graph quadratic equations in two variables



Assignment

1. Explore the third screen - Vertex Form
2. Change the values of a , h and k
3. Check the graph and its roots



About the Spoken Tutorial Project

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- ▶ It summarises the Spoken Tutorial project



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- ▶ If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Answers for THIS Spoken Tutorial

- ▶ Questions in THIS Spoken Tutorial?
- ▶ Visit <https://forums.spoken-tutorial.org>
- ▶ Choose the minute and second where you have the question
- ▶ Explain your question briefly
- ▶ The Spoken Tutorial project will ensure an answer

You will have to register to ask questions



Acknowledgements

The Spoken Tutorial project is funded by the Ministry of Education, Govt. of India



Thank you

- ▶ **This is Shraddha Kodavade, a FOSSEE summer fellow 2022, IIT Bombay signing off**
- ▶ **Thanks for joining**

