

MINISTRY OF EDUCATION
CHRISTMAS TERM
SEPTEMBER 2020

GRADE 11

SUBJECT: MATHEMATICS

WEEK 3 LESSON 2

TOPIC: RELATIONS FUNCTIONS AND GRAPHS

SUB-TOPIC: Quadratic functions and graphs

Draw and interpret graphs for a quadratic

Function to determine:

- a).the image of a given element in the domain
- b).the maximum or minimum value of the function
- c).the equation of the axes of symmetry
- d). the roots of the function

OBJECTIVES:

Content:

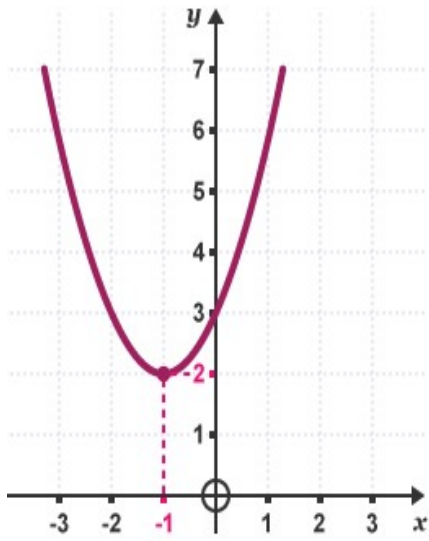
1. Sketch the graph of $y = x^2 + 2x + 3$
Determine the axis of symmetry
2. A. Draw the graph for the function $y = x^2 + 2x - 8$, for the domain -5 to 3
- b. Determine the maximum or minimum value of the function $f(x)$
- c. determine the roots of the equation
- d. determine the axis of symmetry

Reference: <https://www.bbc.co.uk/bitesize/guides/zqxv6yc/revision/2>

Mathematics a Complete Course vol 2.

Solution:

1. Axis of sym = -1



2. $F(x)_{\min} = -9$
 $X = -1$