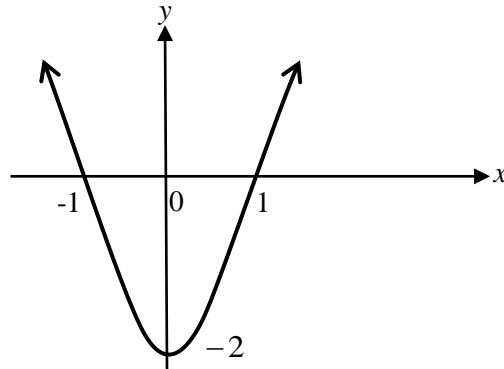# 2021 Worksheet 5
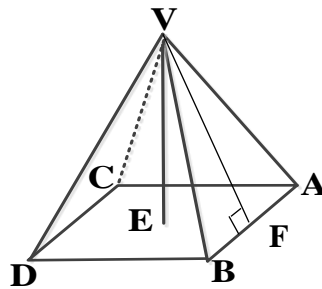## Year 11 Applied Mathematics

Write the answers in your Exercise Book.

1. Consider a relation given by the graph below.

   (a)   What are the coordinates of the **x-intercepts**?   **(1 mark)**

   (b)   What are the coordinates of the **y-intercept**?   **(½ mark)**

   (c)   State the **domain**.   **(1 mark)**

   (d)   State the **range**.   **(1 mark)**

   (e)   Is this relation a **function**? Give a reason for your answer.   **(1 mark)**

2. A **square pyramid** is shown below.

   The length of **DB** = 10 cm , **AB** = 10 cm , the perpendicular height **VE** = 12 cm and **VF** = 13 cm

   (a)   Calculate the **volume** of this pyramid in cm^3.   **(2 marks)**

   (b)   What is the total **surface area** of the pyramid?   **(2 marks)**