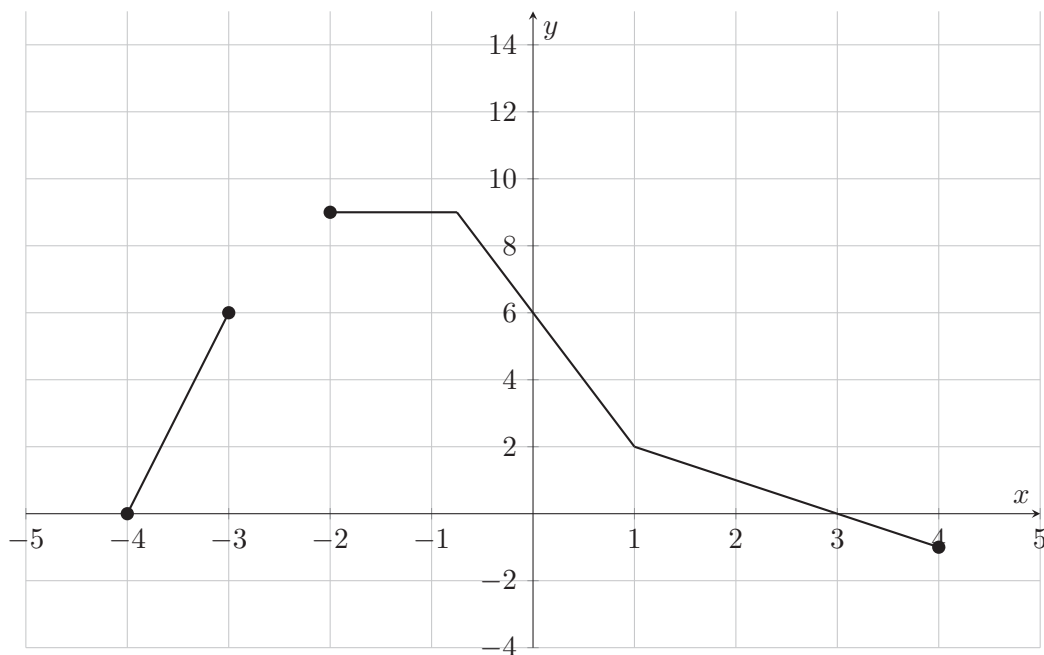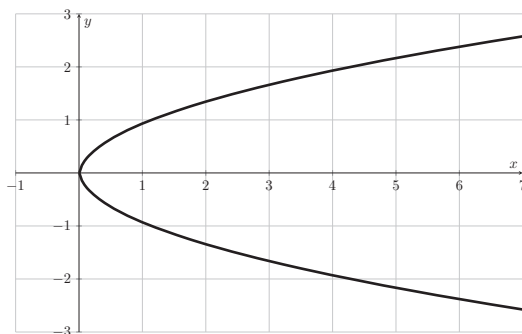1. The entire graph of the function $g(x)$ is given below

   (a) What is $g(2)$?

   (b) What is $g(1)$?

   (c) What is $g(-1)$?

   (d) What is the domain of $g(x)$?

   (e) What is the range of $g(x)$?

   (f) For which x values is $g(x) = 6$?

   (g) For which x values is $g(x)$ positive?

   (h) For which x values is $g(x)$ negative?

   (i) For which x values is $g(x)$ greater than 6?

2. Is the following graph a function? Explain why using the definition of a function.

3. Let $f(x) = 3x - 2$ find

   (a) $f(1)$

   (b) $f(-2)$

   (c) All x values for which $f(x) = 0$.

4. The function
$$C(x) = 231 + 0.2x$$
gives the cost of producing x feet of climbing rope in US dollars.

(a) Is $C(x)$ a linear function?

(b) What is the domain of this function given the context?

(c) How much money would it cost to produce 1000 feet of rope?

(d) If we only produced 1000 feet of rope, how much money would we have to charge per foot in order to just break even?

(e) How much money does it cost to increase production by one foot?