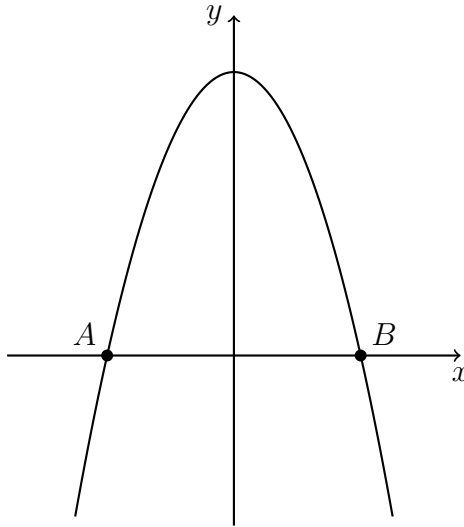


Name:

Spiral Review: 6-5 P1 (No Calculator) Calculus Volumes

1. 14M.2.sl.TZ2.2

Let $f(x) = 5 - x^2$. Part of the graph of f is shown in the following diagram.



The graph crosses the x -axis at the points A and B .

(a) Find the x -coordinate of A and B . [3 marks]

(b) The region enclosed by the graph of f and the x -axis is rotated 360° about the x -axis.

Find the volume of the solid formed. [3 marks]

2. 13N.2.sl.TZ0.2

Let $f(x) = (x - 1)(x - 4)$.

(a) Find the x -intercepts of the graph of f . [3 marks]

(b) The region enclosed by the graph of f and the x -axis is rotated 360° about the x -axis.

Find the volume of the solid formed. [3 marks]