



Here is a sketch of $y = 9 - x^2$
The graph is used to model the cross section of a tunnel.

Calculate an estimate of the area under the graph.

Find the nth term of

-12 -9 -4 3 ...

Solve the simultaneous equations

$$y = 9x^2 + 11x + 3$$

$$5x - y + 2 = 0$$

Simplify fully

$$\frac{3x^2 + 20x - 7}{16x^2 - 1} \div \frac{x + 7}{4x + 1}$$