

29th January

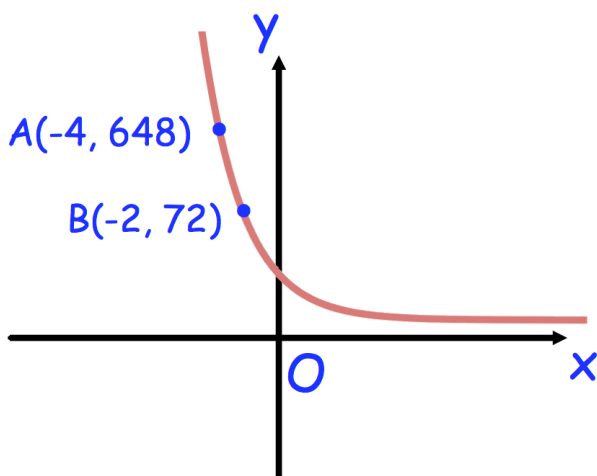
Corbettmaths

Solve the inequality $\frac{4 - 5x}{3} > -7$

Write $(1 + 3\sqrt{6})(5 - \sqrt{6})$ in the form $a + b\sqrt{6}$ where **a** and **b** are integers.

$(2x - 1)$ is a factor of
 $2x^3 - 33x^2 + ax - 63$
Find **a**

The sketch shows a curve with equation $y = ab^{-x}$ where $a > 0$ and $b > 0$



The curve passes through the points $(-4, 648)$ and $(-2, 72)$

Calculate the value of **a** and **b**