

2nd Jan



Corbettmαths

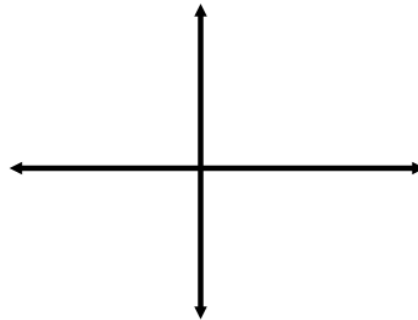
Given that

$$y = 8x^3 + 3 - 2x^{\frac{1}{2}} \quad x > 0$$

Find $\frac{dy}{dx}$ Find where the line $7y = 3x + 10$ meets the x-axis.

Given that

$$f(x) = \frac{1}{x}$$

Sketch the graph of $y = -f(x)$ 

Donald saves some of his pocket money each week.

He saves 10p in week 1,
16p in week 2, 22p in week 3 and
so on for 40 weeks.

Find the amount he saves in week 40.

Calculate his total savings over the 40 weeks.