Name: _____ 5-a-day Core 1

8th April

Corbettmaths

$$\int 9x^2 + \frac{6}{x^2} - 1 \; dx$$

The point P (4, 8) lies on the curve C with equation $y = f(x)$, $x > 0$ and

$$f'(x) = \frac{1}{2}x^2 + \frac{4}{\sqrt{x}}$$

Find the equation of the tangent to C at the point P

Delia saves money over the period of 100 weeks.

She saves £1.50 in week 1, £1.55 in week 2, £1.60 in week 3 and so on until week 100.

Find how much she saves in week 25.

Calculate the total amount she saves over the 100 weeks.

Find the area of triangle ABC