

27th March



CorbettmOths

Given

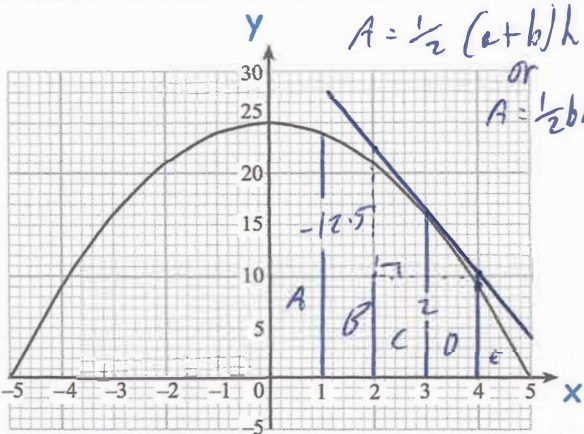
$$f(x) = x + 3$$

$$g(x) = x^2$$

find

$$gf(x) = (x+3)^2$$

$$= x^2 + 6x + 9$$



Calculate an estimate of the gradient of the curve at the  $x = 3$

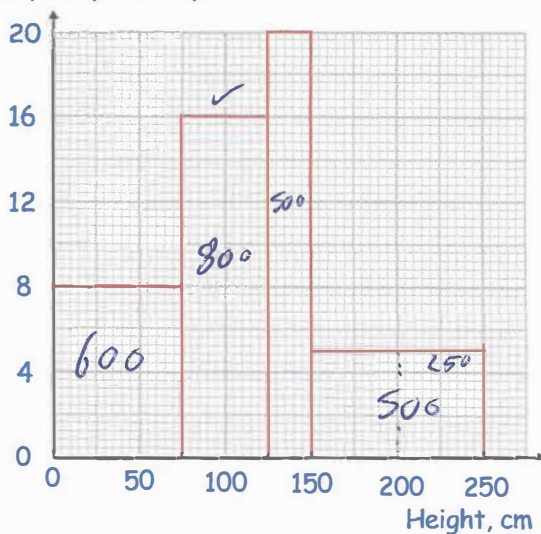
$$\frac{-12.5}{2} = -6.25$$

- A: 24.5
- B: 22.5
- C: 18.5
- D: 12.5
- E: 45

Find an estimate of the area between the curve and the x-axis between  $x = 0$  and  $x = 5$

$$82.5$$

Frequency Density



Find an estimate of the median

$$\frac{n}{2} = \frac{2400}{2} = 1200^{\text{th}} \text{ value}$$

$$75 + \frac{600}{800} \times 50$$

$$112.5$$

Two sunflowers are selected at random. Calculate the probability that both sunflowers have a height greater than 2m.

$$\frac{250}{2400} \times \frac{249}{2399} = \frac{415}{38384}$$