



Curves with equations $y = 2x^{\frac{1}{2}} + 1$ and $y = \frac{1}{2}x^2 - x + 1$ intersect at $A(0, 1)$ and $B(4, 5)$, as shown in the diagram.

- (a) Find the area of the region between the two curves. [5]

[illegible]

The acute angle between the two tangents at B is denoted by α° , and the scales on the axes are the same.

(b) Find α .

[5]

[illegible]