



The diagram shows the curve with equation $y = 5 + 3 \cos(30x + 60)^\circ$, for $0 \leq x \leq 12$.

- (a) (i) State the greatest value of y for points on the curve. [1]
- (ii) Determine the value of x for which this greatest value of y occurs. [3]

There are two points on the curve for which the value of y is 7.

- (b) Determine the values of x at these two points. [5]