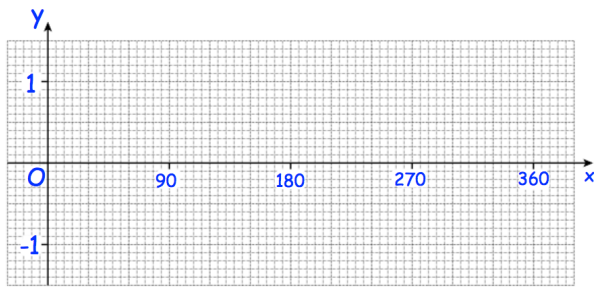**26th December**

Corbettmaths

$2x^2 - 6x + 1$ can be written in the form $a(x - b)^2 + c$

Find a, b and c

Simplify $5\sqrt{8} + \sqrt{18}$
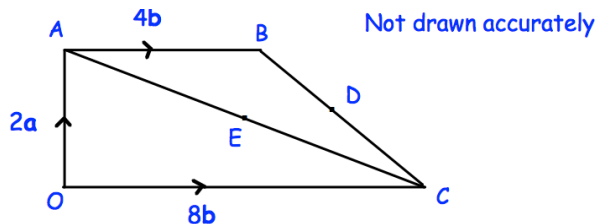

Sketch the graph of $y = -\cos x$ for $0 \leq x \leq 360$.

$\overrightarrow{OA} = 2a$ $\overrightarrow{AB} = 4b$ and $\overrightarrow{OC} = 8b$

Point D is the midpoint of BC.
Point E is the midpoint of AC.

Show $\overrightarrow{ED}$ and $\overrightarrow{OC}$ are parallel

Not drawn accurately

A circle has equation $x^2 + y^2 = 50$
The point A has coordinates (1, 7)
The line l is the tangent to the circle at the point A.
The line l crosses the x-axis at the point P.

Work out the area of triangle OAP.