1.
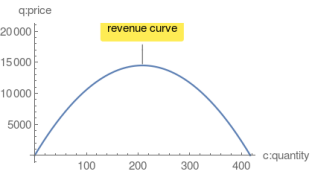
1. (a) Basis for the Revenue model is a simple multiplication:

Revenue $= \text{Price} \times \text{Quantity} = (-\frac{1}{3}c + 139) \times c = 139\,c - \frac{c^2}{3}$

Notice the latter is a quadratic:

(b) Domain starts at 0 BritishPounds revenue up to c-intercept coordinate equal to twice the value of vertex of the Parabola: 417

(d) The maximum occurs at the vertex c-intercept coordinate:

$\frac{417}{2}$

or the amount 14490.8 BritishPounds .