1.

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

Revenue = Price×Quantity = $(-\frac{8}{9}z+131) \times z = 131z - \frac{8z^2}{9}$

Notice the latter is a quadratic:
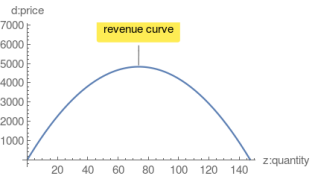
(2) Domain starts at 0 BritishPounds revenue up to z-intercept coordinate equal to twice the value of vertex of the Parabola:

$\frac{1179}{8}$

(4) The maximum occurs at the vertex z-intercept coordinate:

$\frac{1179}{16}$

or the amount 4826.53 BritishPounds .