

Econ 101 | Demo C2

Question | Smoked Toffee

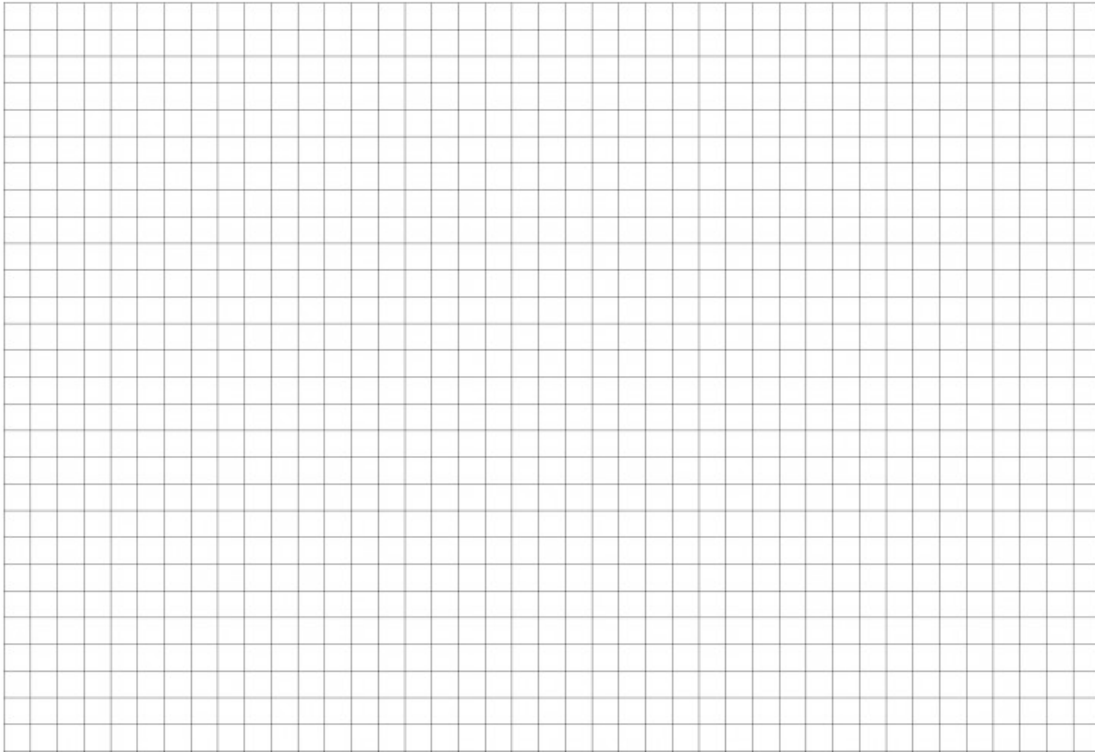
In recent years Hogsmeade has seen a proliferation of candy shops selling smoked toffees. The Demand (marginal benefit) curve and Supply (marginal cost) curve for smoked toffee can be represented by the following relationships.

$$D : P_b = 20 - \frac{1}{2}Q_d$$
$$S : P_s = Q_s$$

Due to the metabolic issues among the younger generation of wizards in the community resulting from the consumption of these high glicemic index treats, the Ministry of Magic imposed a 2 Galleon tax on the sale of smoked toffee.

A | Tax Equilibrium

Use a graph and algebra to discuss the impact of the tax on the market. No need to include welfare measures here.



B | Post-Tax Welfare

Identify the post-tax welfare on the graph. Be sure to include how the welfare areas changed after the policy. No need to do any calculation here: I'm looking for a graphical and intuitive description of what happened to welfare after the policy. Be as clear as possible.



C | The Effects on Residents

This policy had a unintended consequence. The proliferation of smoked toffee makers meant the town saw a subsequent rise in *smoke*. Wood smoke is harmless at low levels, but can cause lung issues at the higher concentrations experienced in Hogsmeade. Use a graph to discuss the unintended effect the tax had on air quality. No need to discuss welfare.

