

Econ 101 | Demo C1

This Demo was given as MiniExam C during the fall 2022 semester. It took 20 minutes.

Question | Yard Flowers

As a small residential town, Hogsmeade has both 1) many shops and 2) many homes near the town center. Residential homeowners often plant flowers in their front yards, contributing to the positive atmosphere in town. There are numerous garden stores selling supplies for planting and growing many varieties. The supply and demand relationships for a dozen (generic) flowers is given by the following equations, with prices in Galleons.

$$D : P_b = 10 - \frac{1}{10}Q_d$$

$$S : P_s = \frac{1}{2}Q_s$$

Unsurprisingly a recent study found a positive impact on the community from residents planing flowers in their front yards. This impact, both on the wellbeing of neighbors and the increased traffic to shops, carries with it a value of 1 Galleon per dozen flowers planted.

The Ministry of Magic has hired you, a burgeoning young economist, to suggest Hogsmeade in how to go about maximizing the welfare of its residents. Use a graph to diagnose the market for flowers and how to improve welfare. No need to explicitly include welfare measures. Include the most relevant components of the model.

