# ECON 0100 | Part C

Vignette C2

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 planing and growing many varieties. The supply and demand relationships for a dozen (generic) flowers is given by the following equations, with prices in Galleons.

$$D : P_b = 100 - \frac{1}{2}Q_b \tag{1}$$

$$S : P_s = Q_s \tag{2}$$

Q1. Market Equilibrium

Recently, a study found a positive impact on the wellbeing of the community from the flowers planted in the front yards of their neighbors. The impact was estimated to carry a value of 10 Galleons per dozen flowers planted. Use a graph and algebra to calculate the size of the market failure by identifying and calculating the deadweight loss.
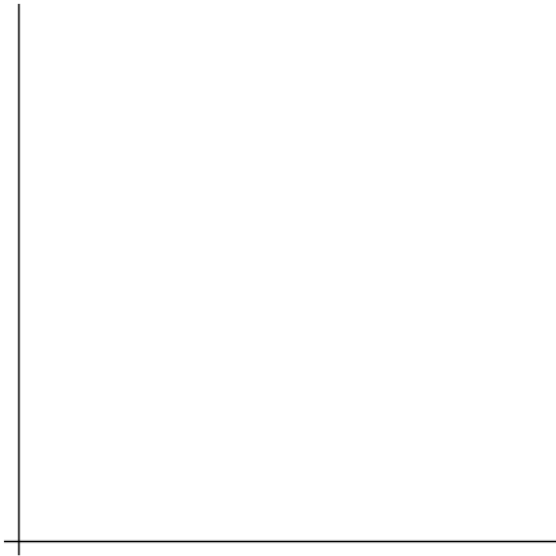
Q2. Corrective Policy

The Ministry of Magic has hired you, a burgeoning young economist, to suggest to the Hogsmeade city council how to go about maximizing the welfare of its residents in light of the benefits of planing flowers. Use the graph below to design a policy. Be as specific as possible by specifying the prices and quantities after the policy.