# Olive Oil Mixing (25 points)

A European company is bottling and selling olive oil. They have in large containers $2000 + 10 * \mathbf{xy}$ gallons of olive oil from Granada, Spain, 1500 gallons from a Tuscan orchard, and $2500 + 25 * \mathbf{xy}$ gallons from Sicily. They can sell bottled olive oil under "**Sicilian**" label, only if at least half of the oil is from Sicily and at least 75% is from Italy (from Tuscany or Sicily). They can sell it under a generic "**Italian**" label, if at least 60% is from Italy (from Tuscany or Sicily). They can also sell it as "**Spanish**" oil, if it contains at least 60% oil from Spain. **Sicilian** brand olive oil sells for 200$/gallon, **Italian** brand sells for $150/gallon, while **Spanish** brand sells for $120/gallon. **Develop a model to mix the oils so that to maximize the profit of the company.**