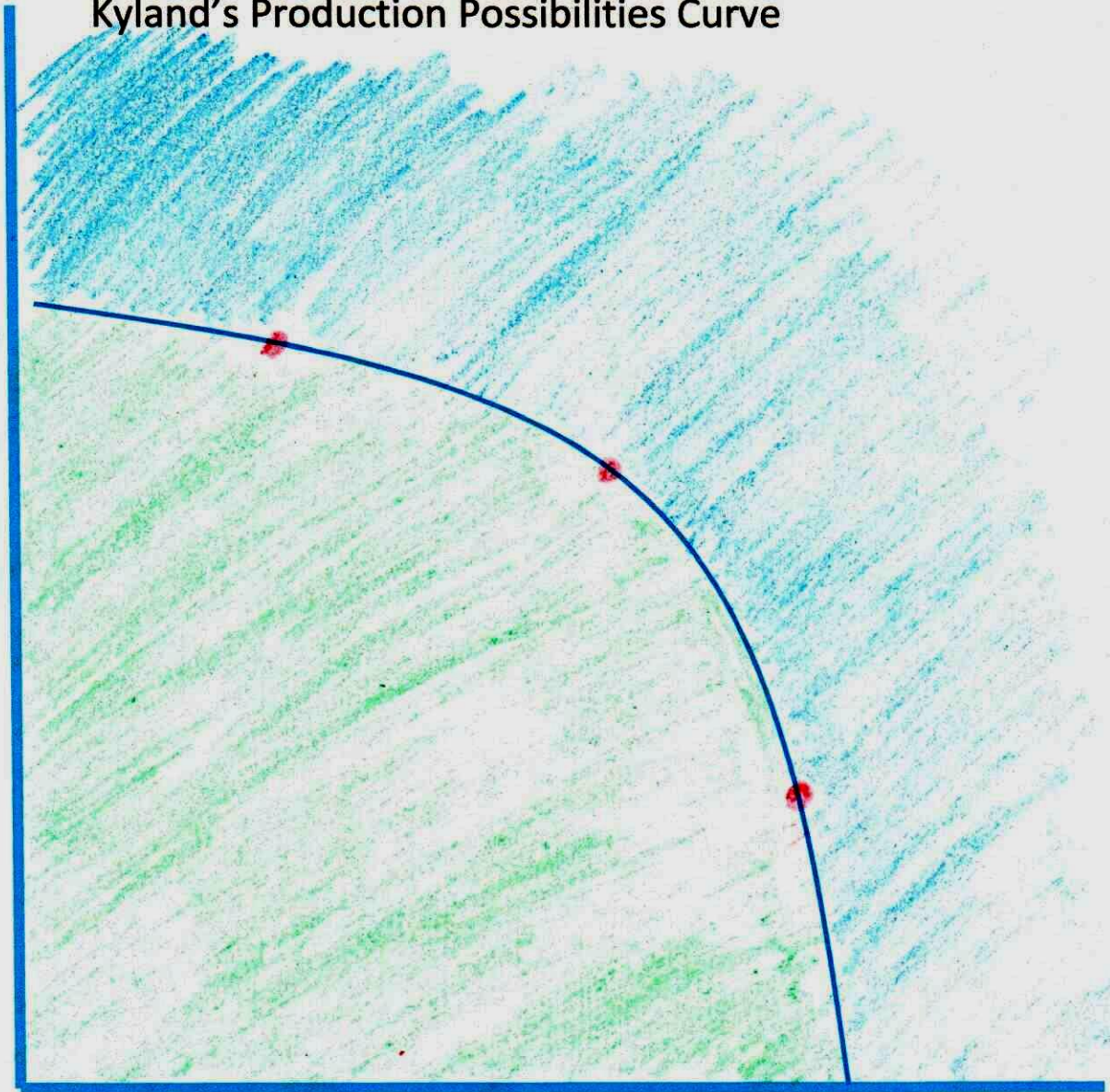


Kyland's Production Possibilities Curve

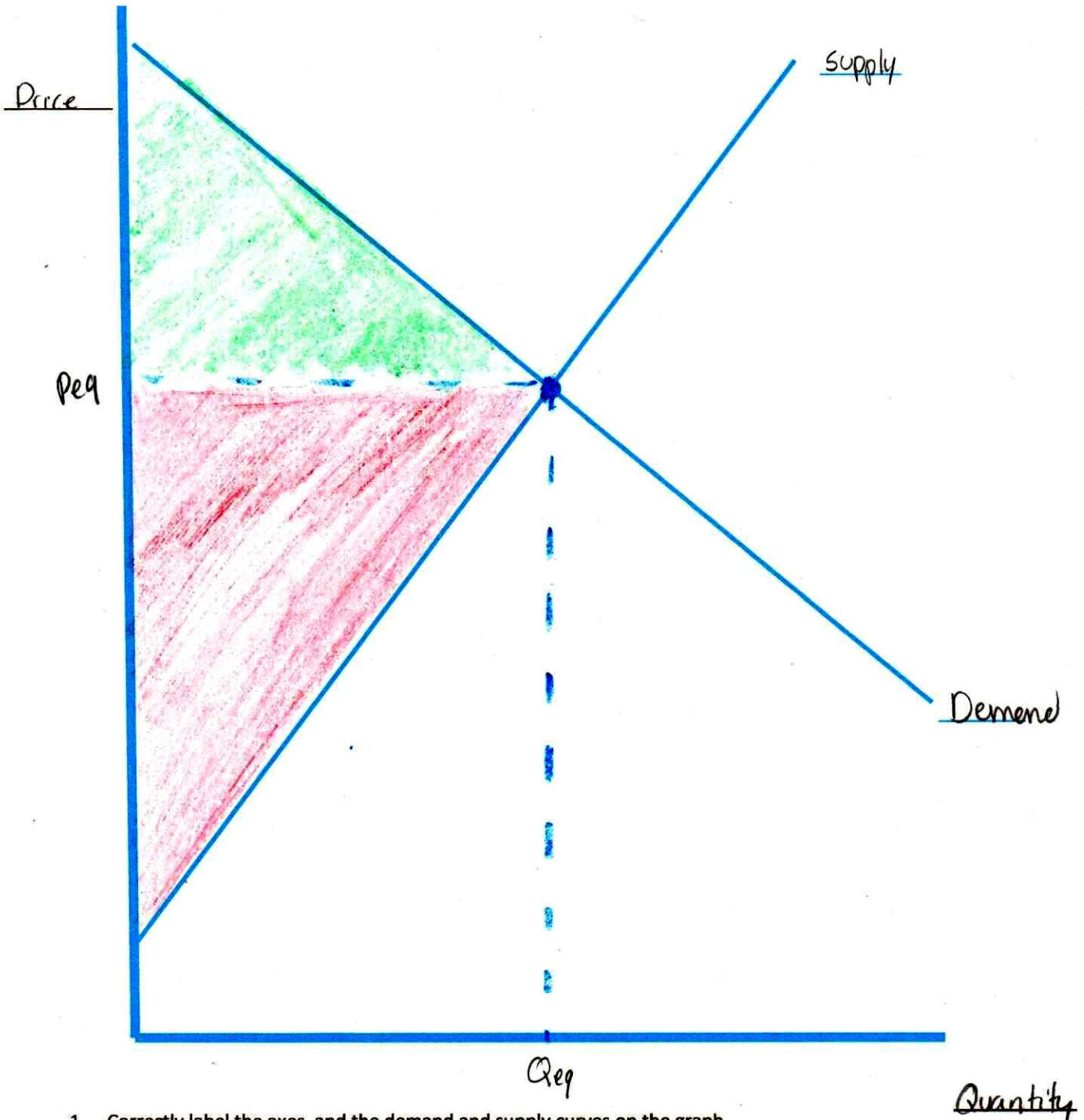
Quantity of Investment goods



Quantity of Consumer goods

1. Correctly label the axes
2. Completely shade the area on the graph representing inefficient production in green
3. Draw three red points that are efficient
4. Shade the area that is presently unattainable in blue

A Perfectly Competitive Market (CS/PS)



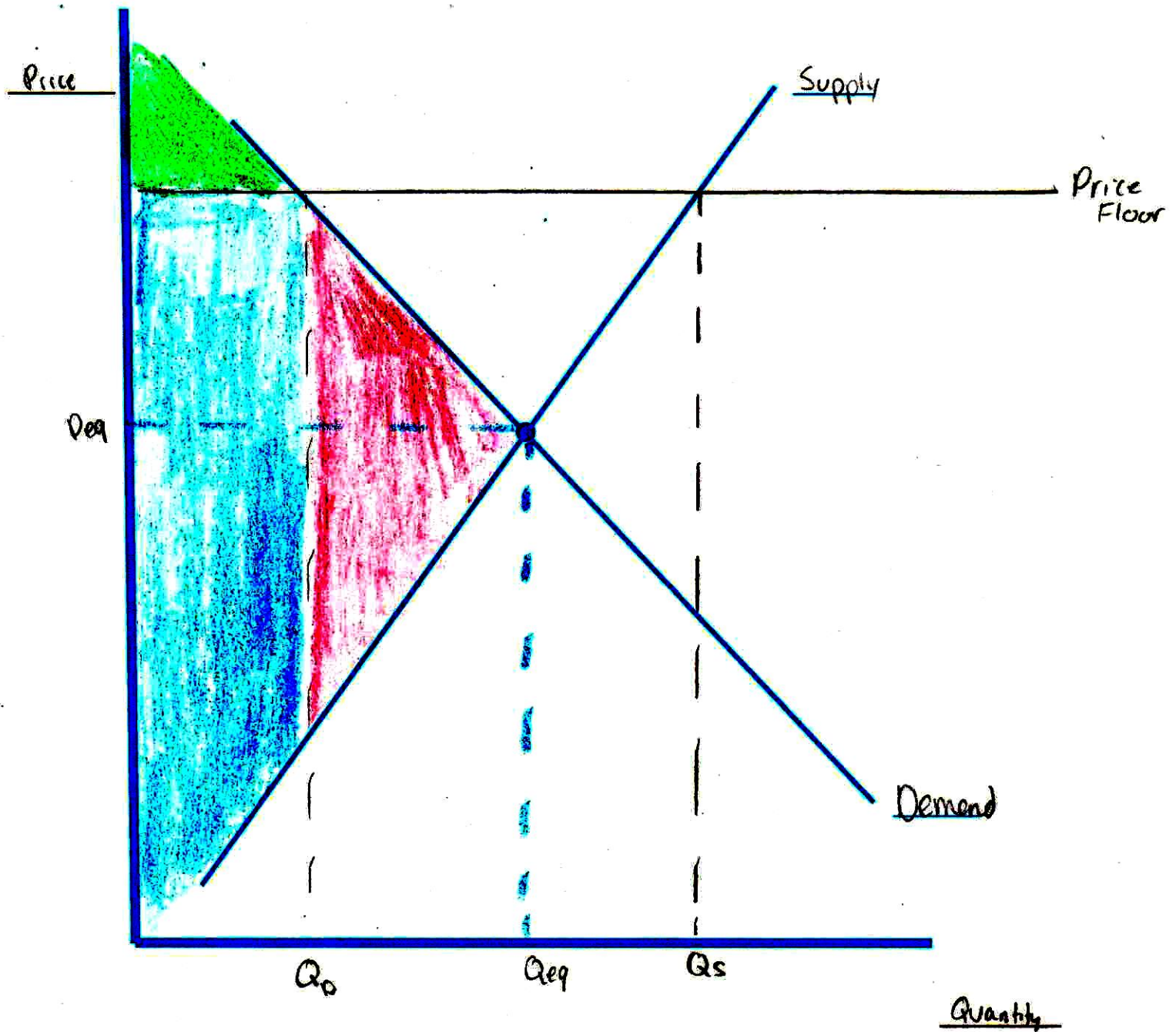
1. Correctly label the axes and the demand and supply curves on the graph
2. Label the market equilibrium price and quantity on the axes using blue
3. Completely shade the area of consumer surplus in green
4. Completely shade the area of producer surplus in red

A Perfectly Competitive Market (Price Ceiling)



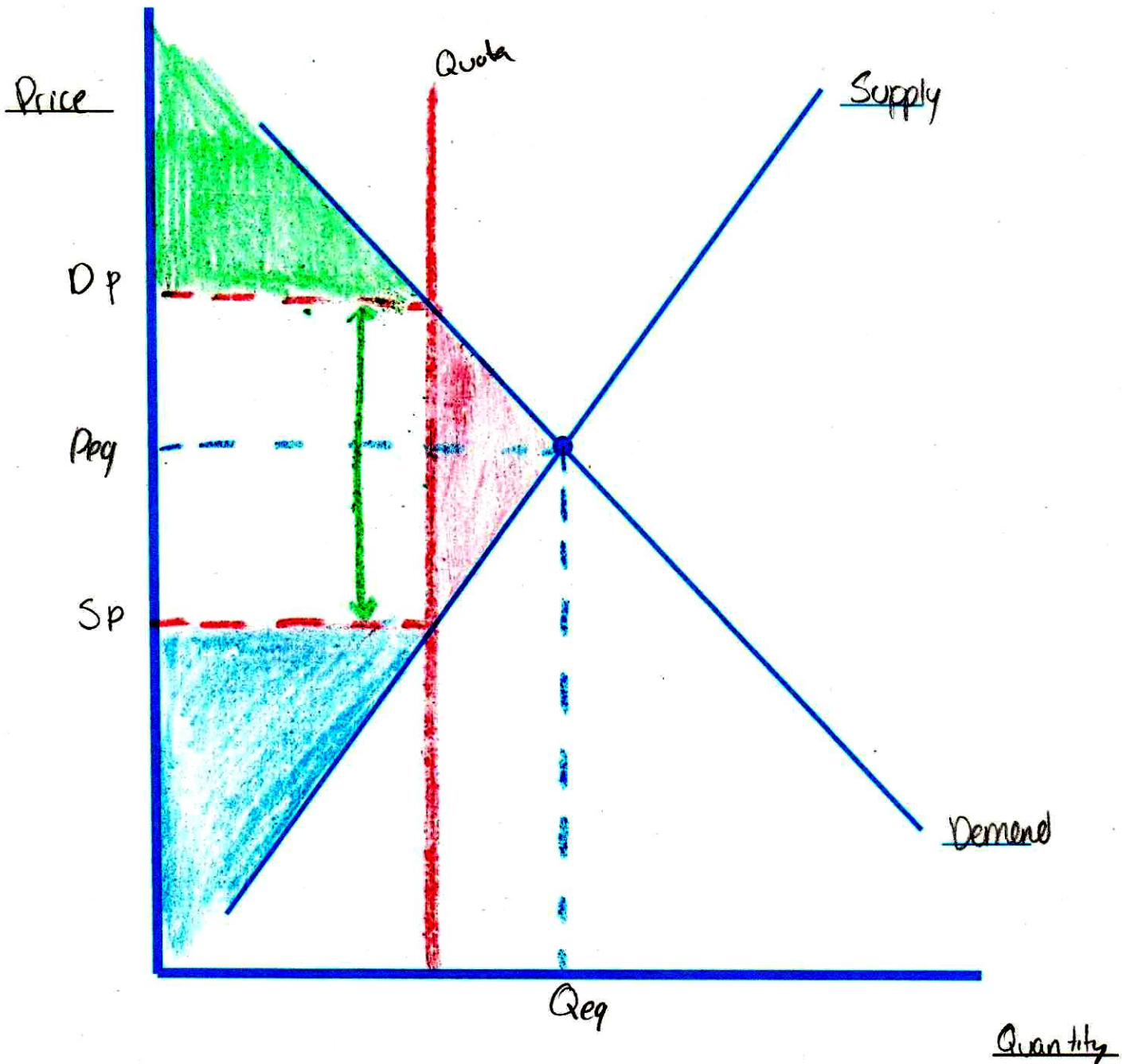
1. Correctly label the axes and the demand and supply curves on the graph
2. Label the market equilibrium price and quantity on the axes using blue
3. Draw a line illustrating an effective price ceiling. Show the quantity demanded (Q_d) and supplied (Q_s), all in red
4. Completely shade the area of consumer surplus with the price ceiling in green
5. Completely shade the area of producer surplus with the price ceiling in blue
6. Completely shade the area of deadweight loss with the price ceiling in red

A Perfectly Competitive Market (Price Floor)



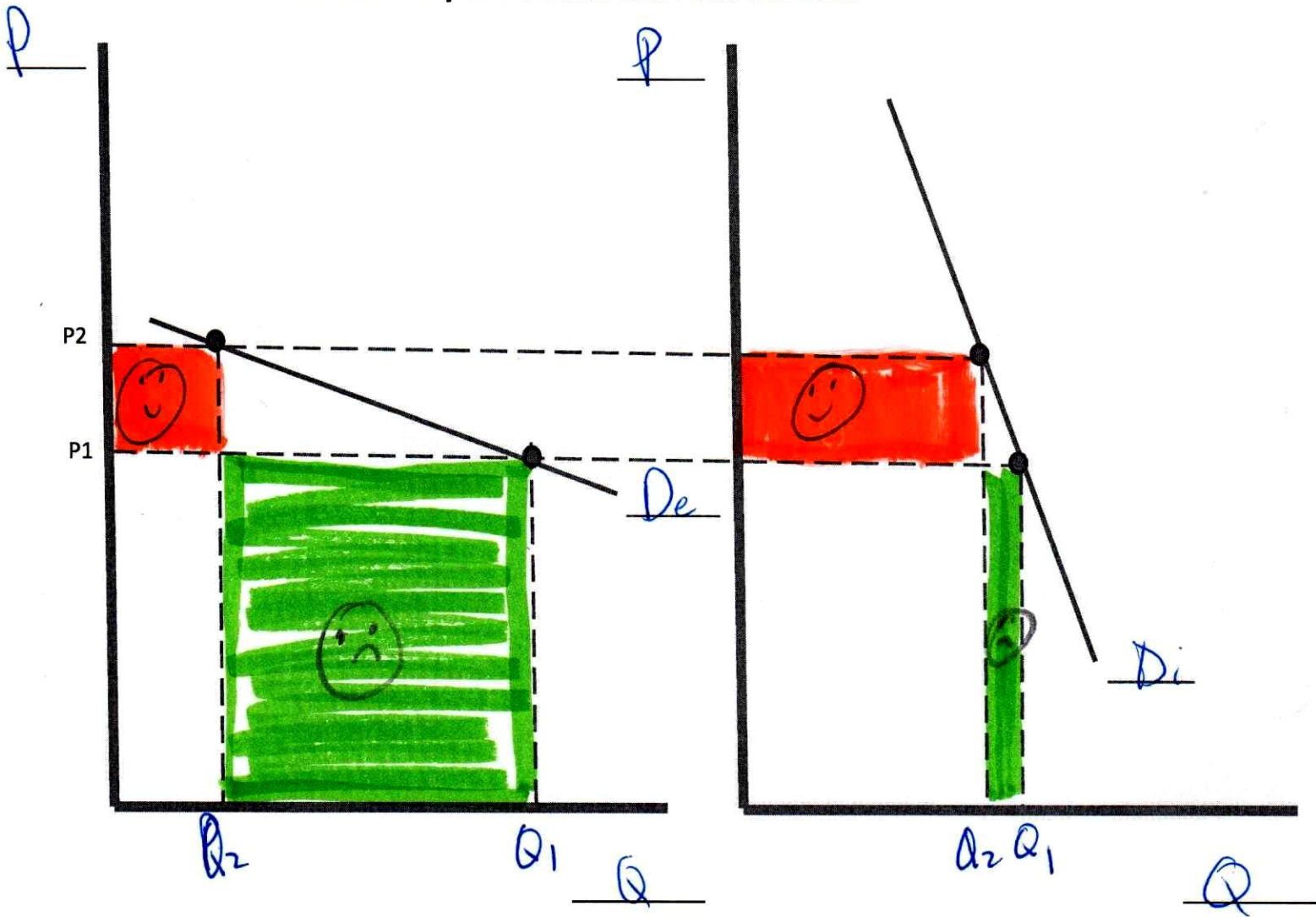
1. Correctly label the axes and the demand and supply curves on the graph
2. Label the market equilibrium price and quantity on the axes using blue
3. Draw a line illustrating an effective price floor. Show quantity demanded (Q_d) and supplied (Q_s), all in red
4. Completely shade the area of consumer surplus with the price ceiling in green
5. Completely shade the area of producer surplus with the price ceiling in blue
6. Completely shade the area of deadweight loss with the price ceiling in red

A Perfectly Competitive Market (Quota)



1. Correctly label the axes and the demand and supply curves on the graph
2. Label the market equilibrium price and quantity on the axes using blue
3. Illustrate an effective quota and label the demand price and supply price, all in red
4. Draw a green line representing the quota rent (wedge)
5. Completely shade the area of consumer surplus with the quota in green
6. Completely shade the area of producer surplus with the quota in blue
7. Completely shade the area of deadweight loss with the price ceiling in red

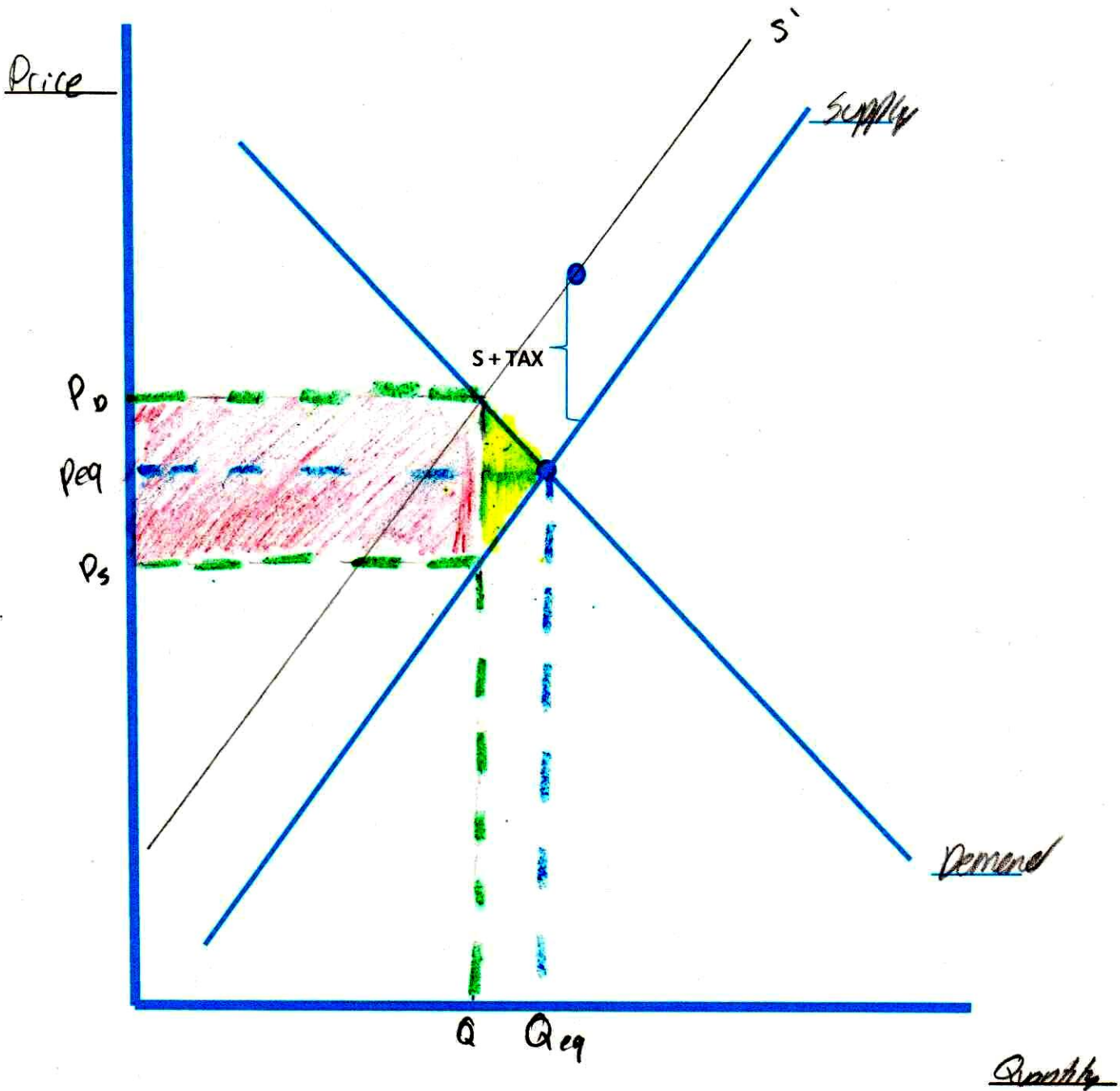
Price Elasticity of Demand and Total Revenue



1. Correctly label the axes and label the more elastic demand curve D_e and the more inelastic demand curve D_i , all in blue
2. Label the quantity that goes with P_1 and P_2 on the horizontal axis of both graphs, in blue
3. When price increases from P_1 to P_2 , the "good news" for the firm is that it gets to sell Q_2 of their output for a higher price. Completely shade the revenue gain from raising price in red on both graphs and put a happy face in the box.
4. When price increases from P_1 to P_2 , the "bad news" for the firm is that it sells less at the higher price. Completely shade the revenue loss from selling less in green on both graphs and put a frowny face in the box.
5. On which graph, (left or the right) is the revenue gain of raising price from P_1 to P_2 greater than the revenue loss? *right*
6. For which type of demand (elastic or inelastic) will an increase in price lead to an increase in total revenue? *inelastic*

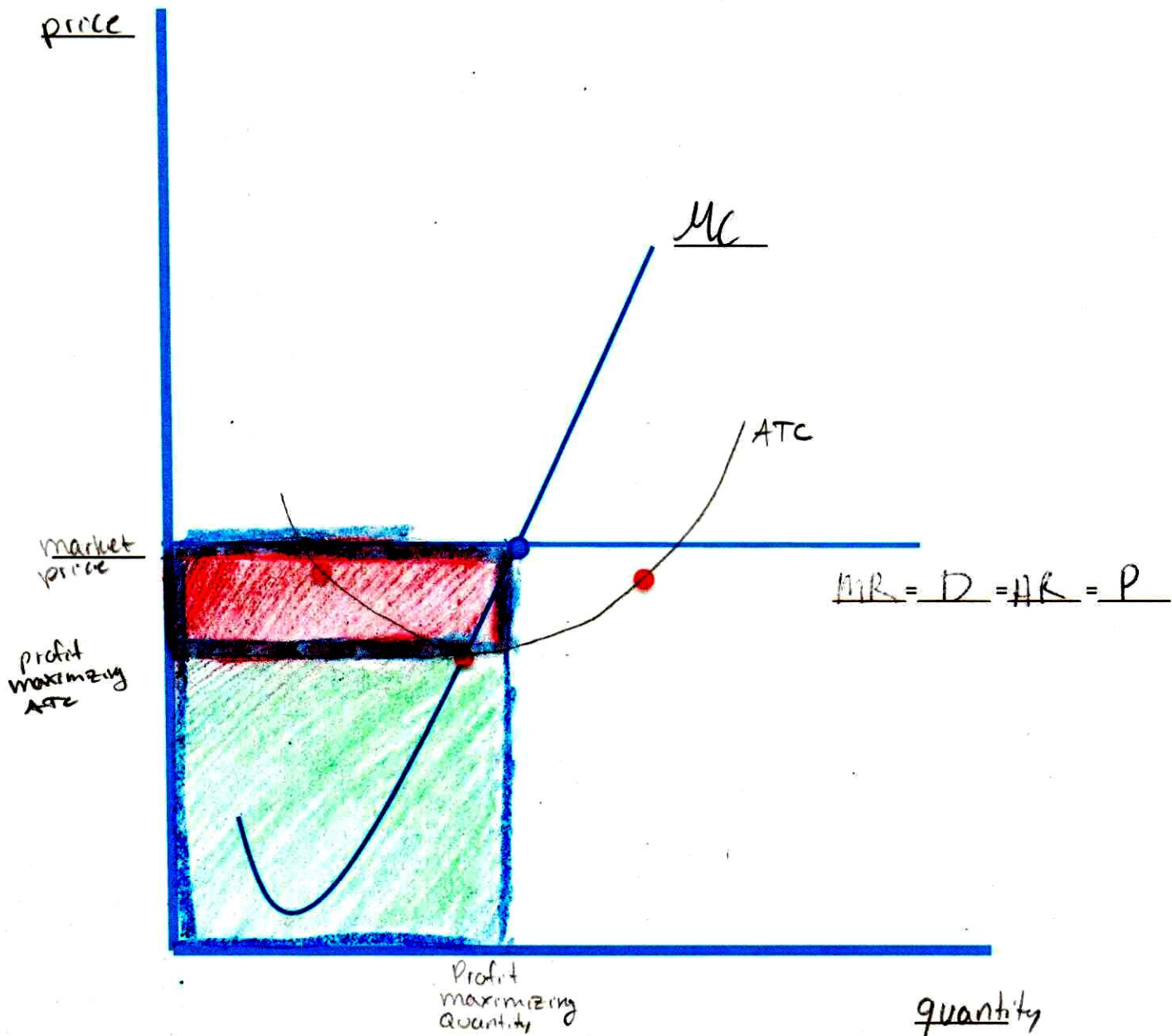


A Perfectly Competitive Market (Tax)



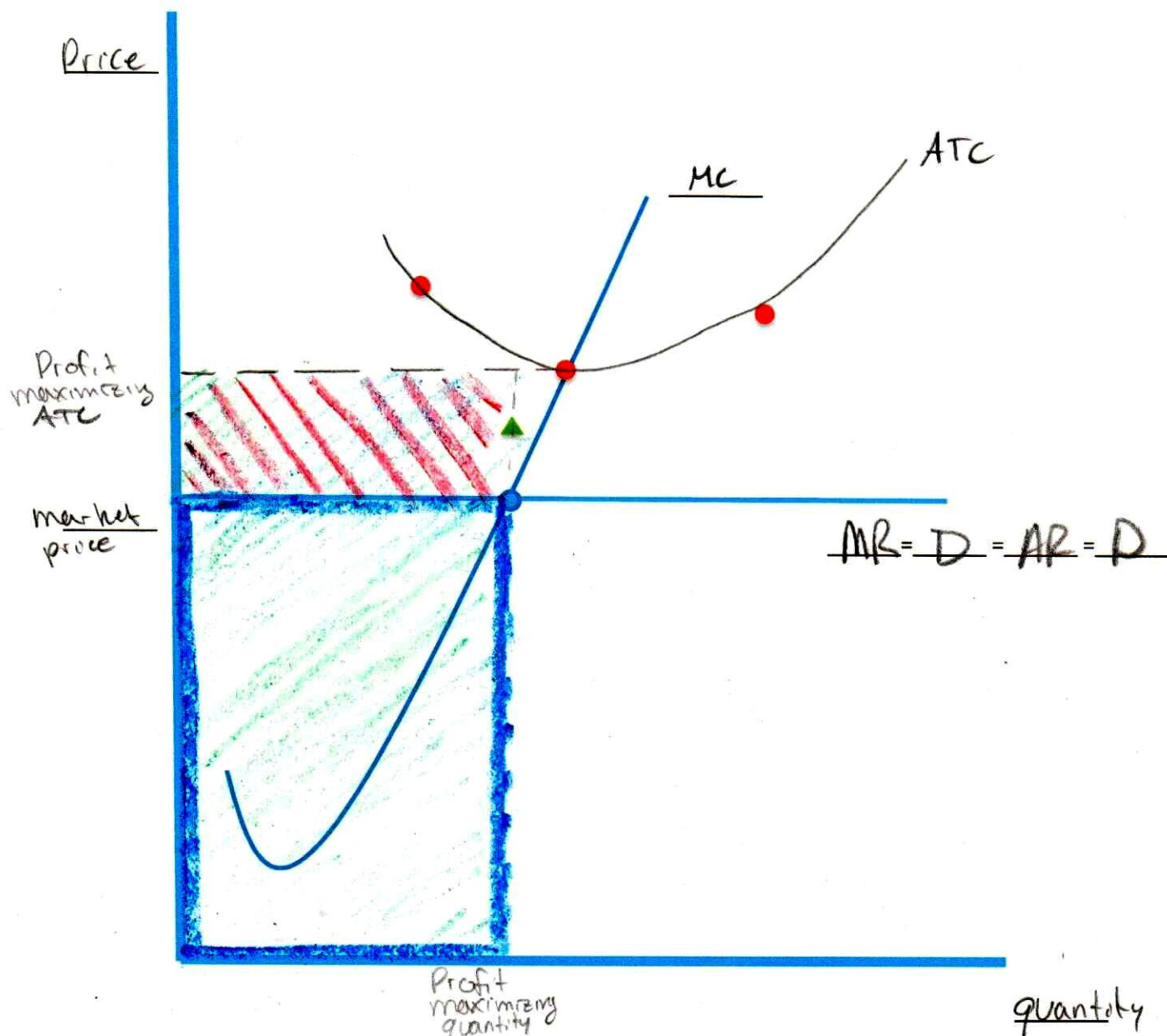
1. Correctly label the axes and the demand and supply curves on the graph
2. Label the market equilibrium price and quantity on the axes using blue
3. Draw a new supply curve, shifted up by the amount of a per unit tax
4. Label quantity sold with the tax on the horizontal axis and the price paid by consumers and the price received by producers on the vertical axis, all in green
5. Completely shade, in red, the amount of tax revenue received by the government
6. Completely shade, in yellow, the deadweight loss resulting from the tax

A Representative Firm Producing Homegrown Tomatoes in Fredericksburg



1. Correctly label the axes and curves on the graph
2. Label the market price on the vertical axis
3. Find the profit maximizing point and label the profit maximizing quantity on the horizontal axis
4. Connect the red dots to create a "U-shaped" ATC curve (with its minimum point where it crosses MC) and label it ATC. Label the profit-maximizing ATC on the vertical axis
5. Is the firm earning a profit or a loss? How do you know? Earning a profit Total cost less than TR
6. Outline the firm's total revenue rectangle in blue, completely shade the firm's total cost rectangle green, and completely shade the firm's profit/loss rectangle red

A Representative Firm Producing Homegrown Tomatoes in Fredericksburg



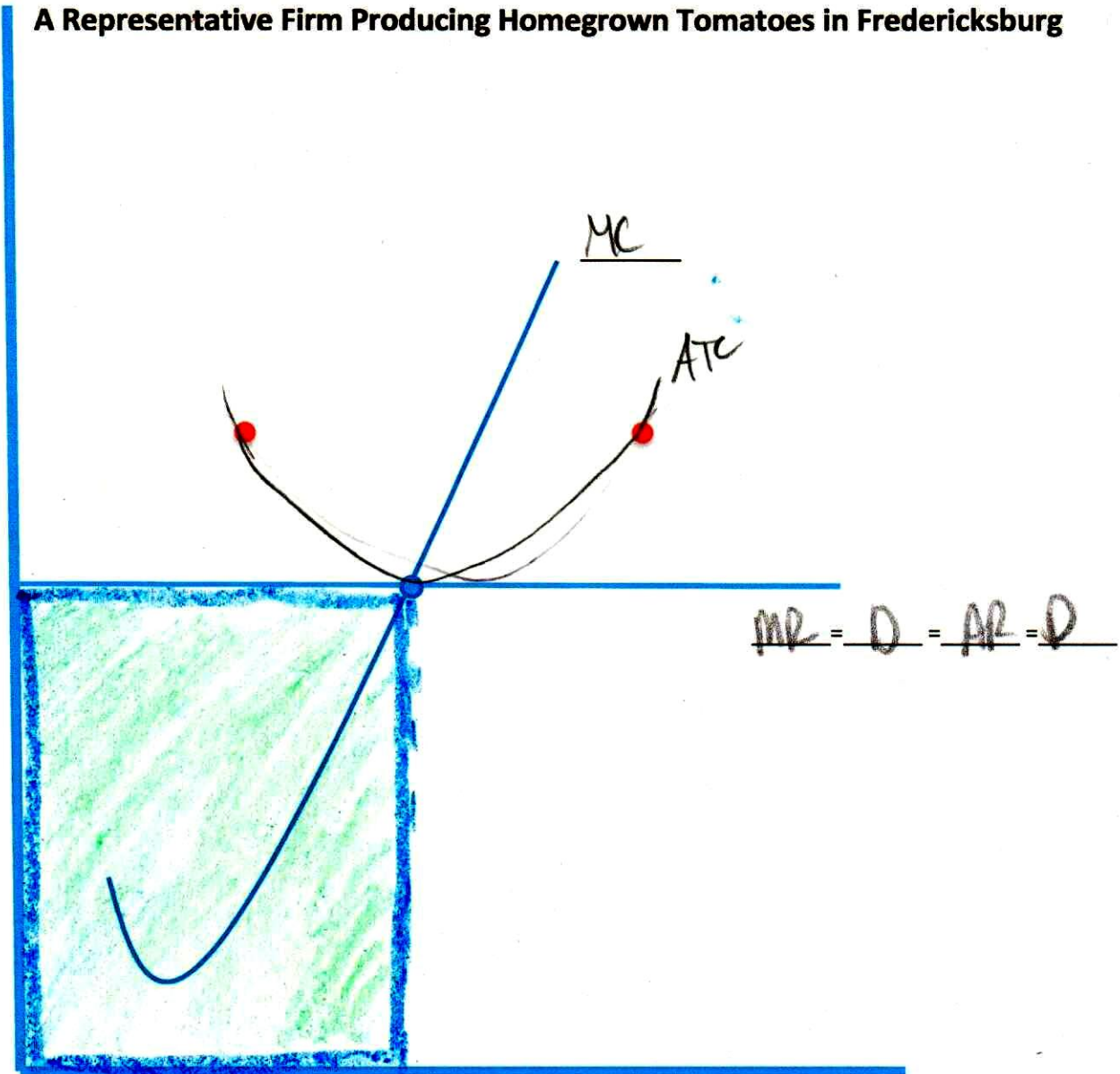
1. Correctly label the axes and curves on the graph
2. Label the market price on the vertical axis
3. Find the profit maximizing point and label the profit maximizing quantity on the horizontal axis
4. Connect the red dots to create a "U-shaped" ATC curve (with its minimum point where it crosses MC) and label it ATC. Label the profit-maximizing ATC on the vertical axis
5. Is the firm earning a profit or a loss? How do you know? *Firm is taking a loss*
6. Outline the firm's total revenue rectangle in blue, completely shade the firm's total cost rectangle Green, and completely shade the firm's profit/loss rectangle red
7. If the green triangle is on the AVC curve, should the firm continue producing in the long-run? Explain.

The firm should not continue producing in the long run.

A Representative Firm Producing Homegrown Tomatoes in Fredericksburg

price

market price

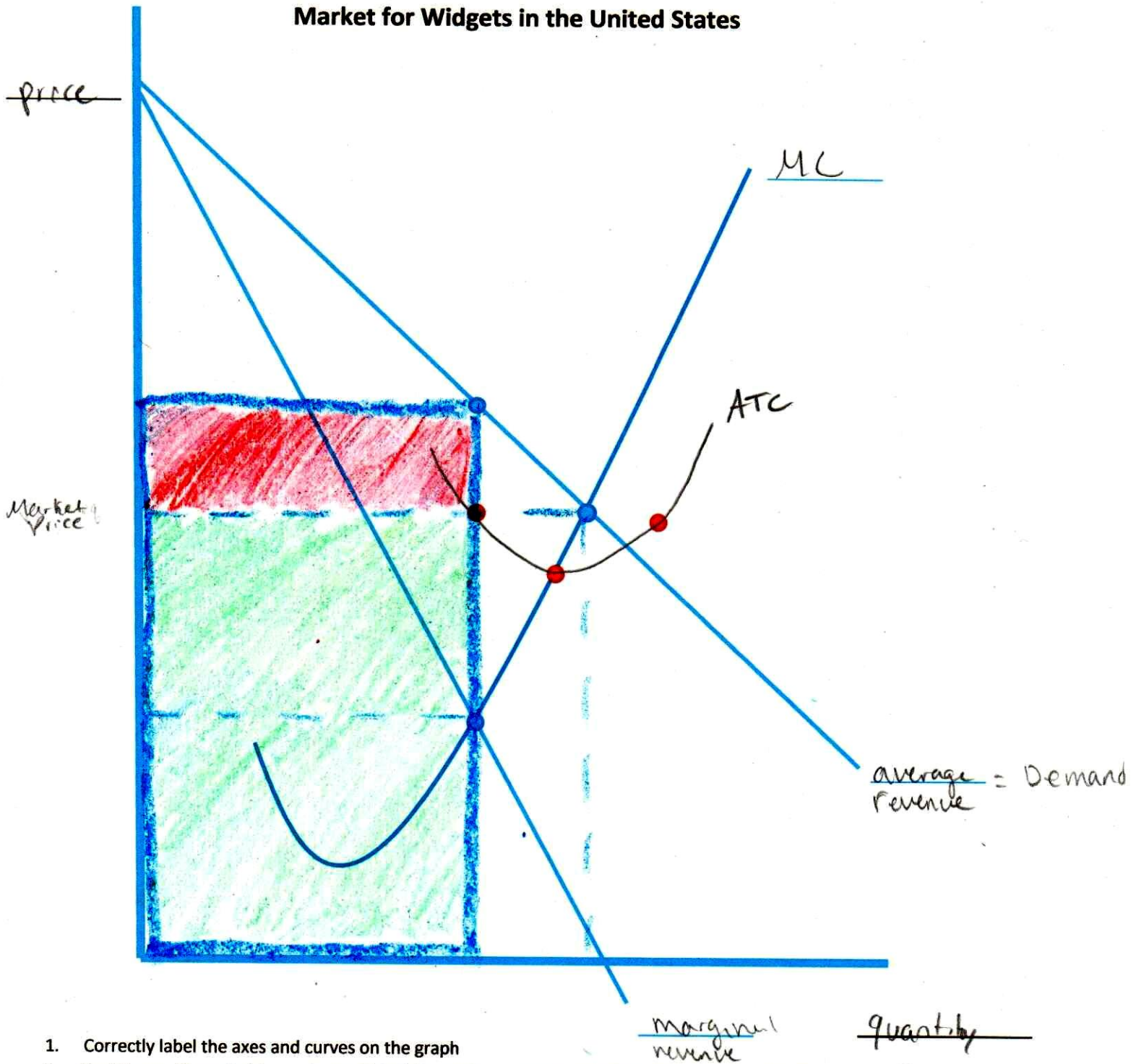


$$\underline{MR = D = AR = D}$$

quantity

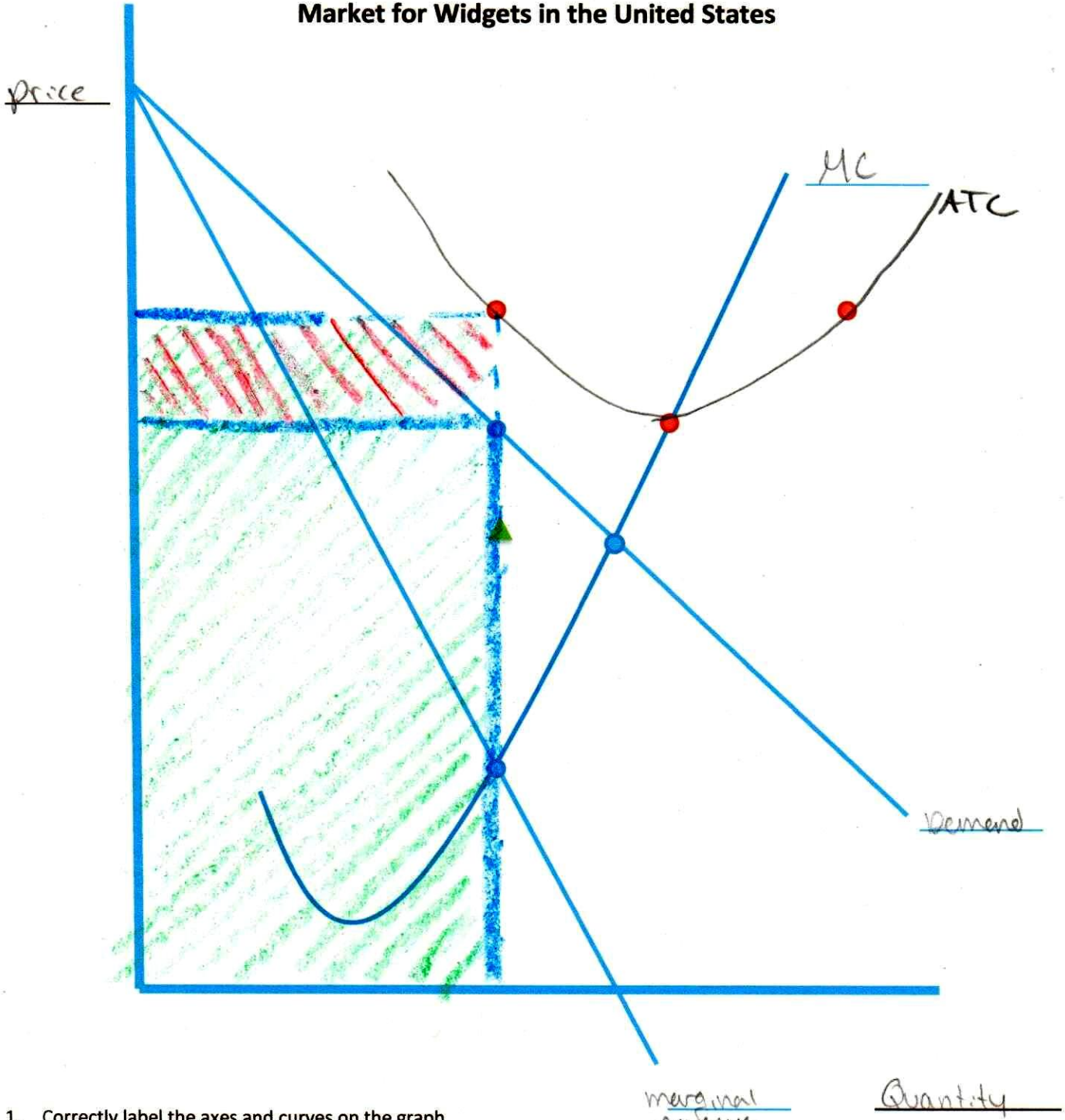
1. Correctly label the axes and curves on the graph
2. Label the market price on the vertical axis
3. Find the profit maximizing point and label the profit maximizing quantity on the horizontal axis
4. Use the red dots to create a "U-shaped" ATC curve (with its minimum point where it crosses MC) that illustrates a normal profit and label it ATC.
5. Outline the firm's total revenue rectangle in blue and completely shade the firm's total cost rectangle green.
6. Is the firm allocatively efficient? How do you know? *Yes, $M Price = M cost$*
7. Is the firm productively efficient? How do you know? *Yes, producing at lowest ATC possible*

Market for Widgets in the United States



1. Correctly label the axes and curves on the graph
2. Find the profit maximizing point and label the profit maximizing quantity and price on the axes
3. Connect the red dots to create a "U-shaped" ATC curve (with its minimum point where it crosses MC) and label it ATC. Label the profit-maximizing ATC on the vertical axis
4. Is the firm earning a profit or a loss? How do you know? *Earning a profit*
5. Outline the firm's total revenue rectangle in blue, completely shade the firm's total cost rectangle green, and completely shade the firm's profit/loss rectangle red

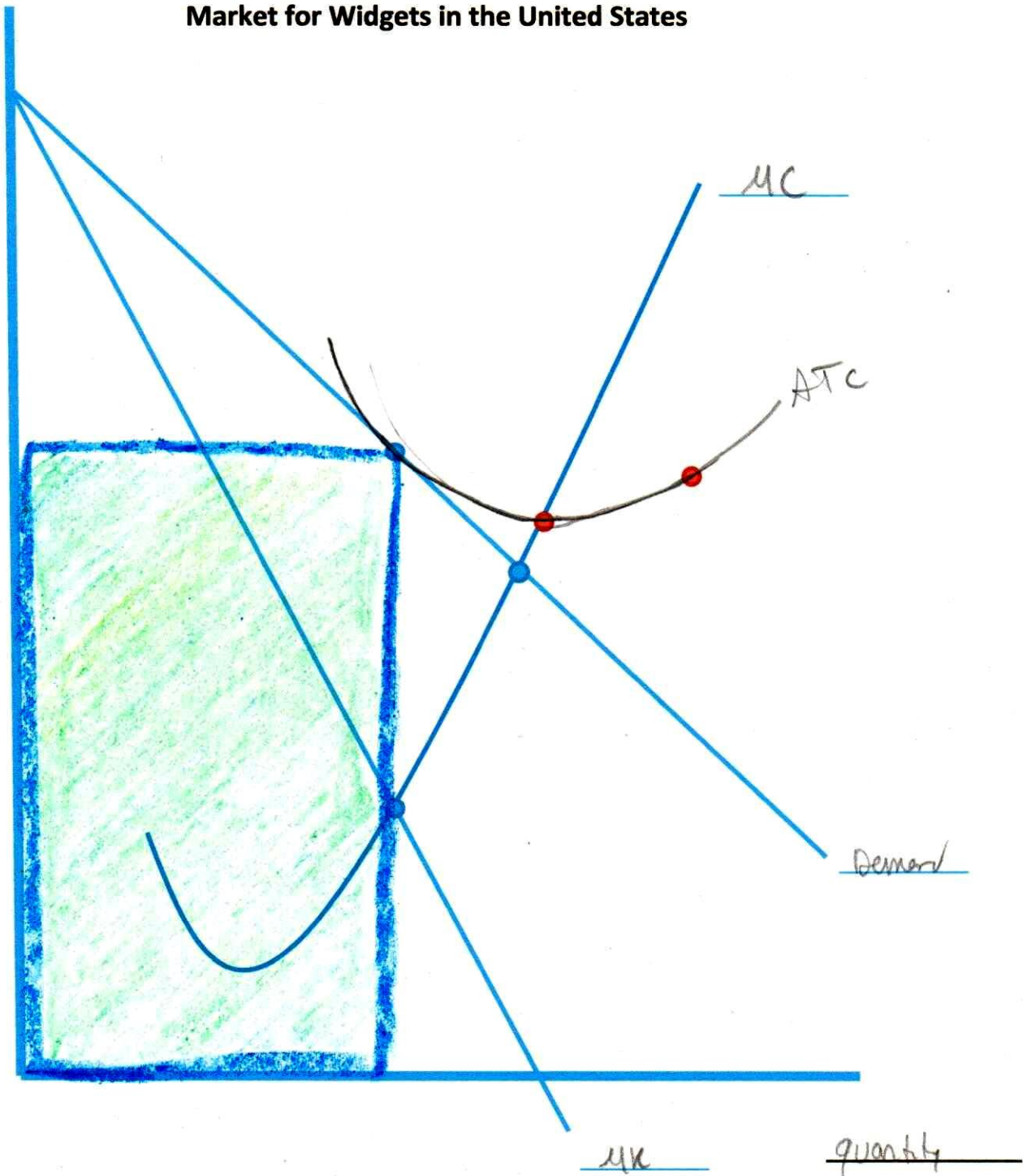
Market for Widgets in the United States



1. Correctly label the axes and curves on the graph
2. Find the profit maximizing point and label the profit maximizing quantity and price on the axes
3. Connect the red dots to create a "U-shaped" ATC curve (with its minimum point where it crosses MC) and label it ATC. Label the profit-maximizing ATC on the vertical axis
4. Is the firm earning a profit or a loss? How do you know? *LOSS. ATC greater than total revenue*
5. Outline the firm's total revenue rectangle in blue, completely shade the firm's total cost rectangle green, and completely shade the firm's profit/loss rectangle red
6. If the green triangle is on the AVC curve, should the firm continue to produce in the long-run? Explain.
Should produce in short run. Shut down in long run

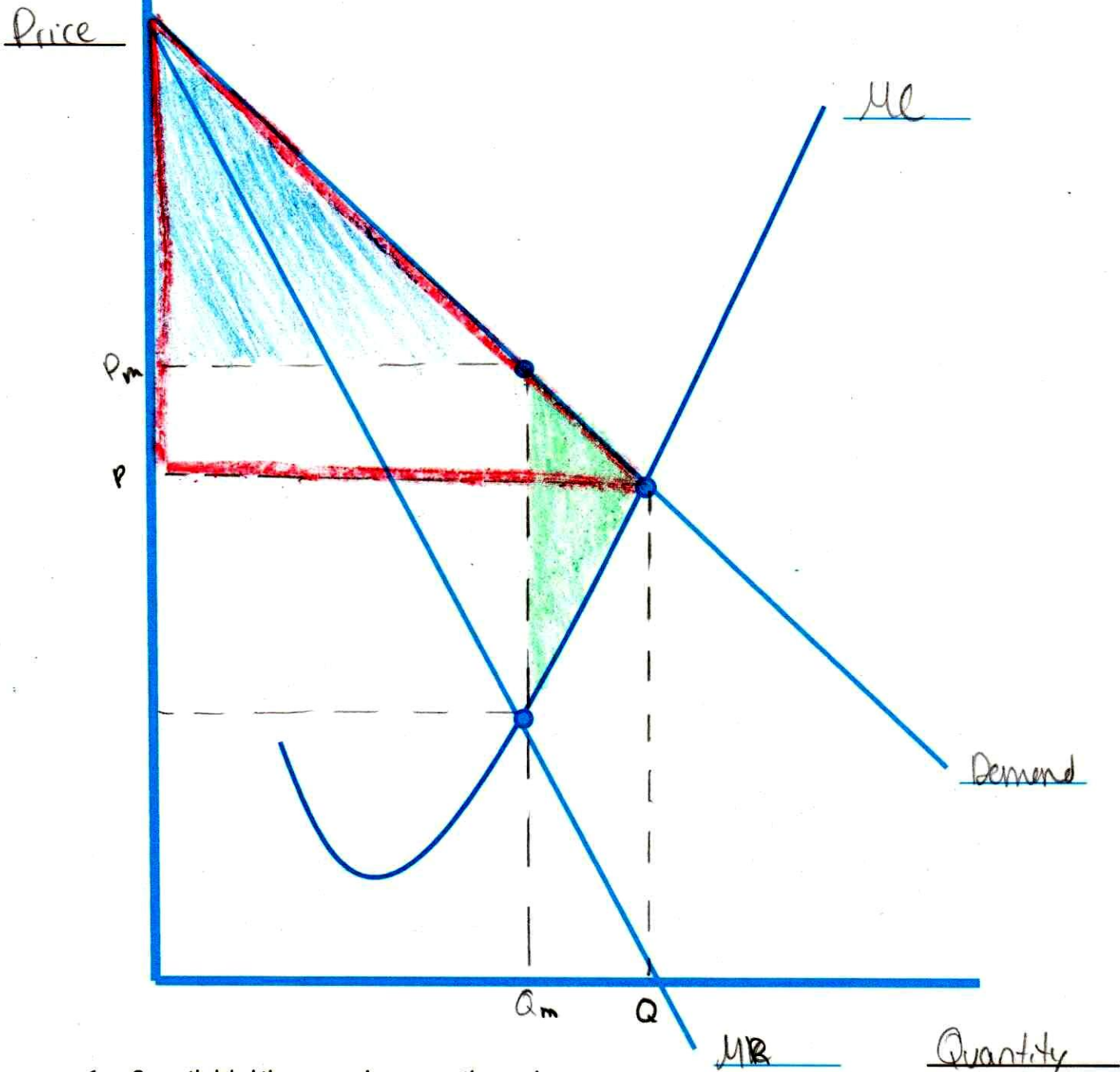
Market for Widgets in the United States

Price



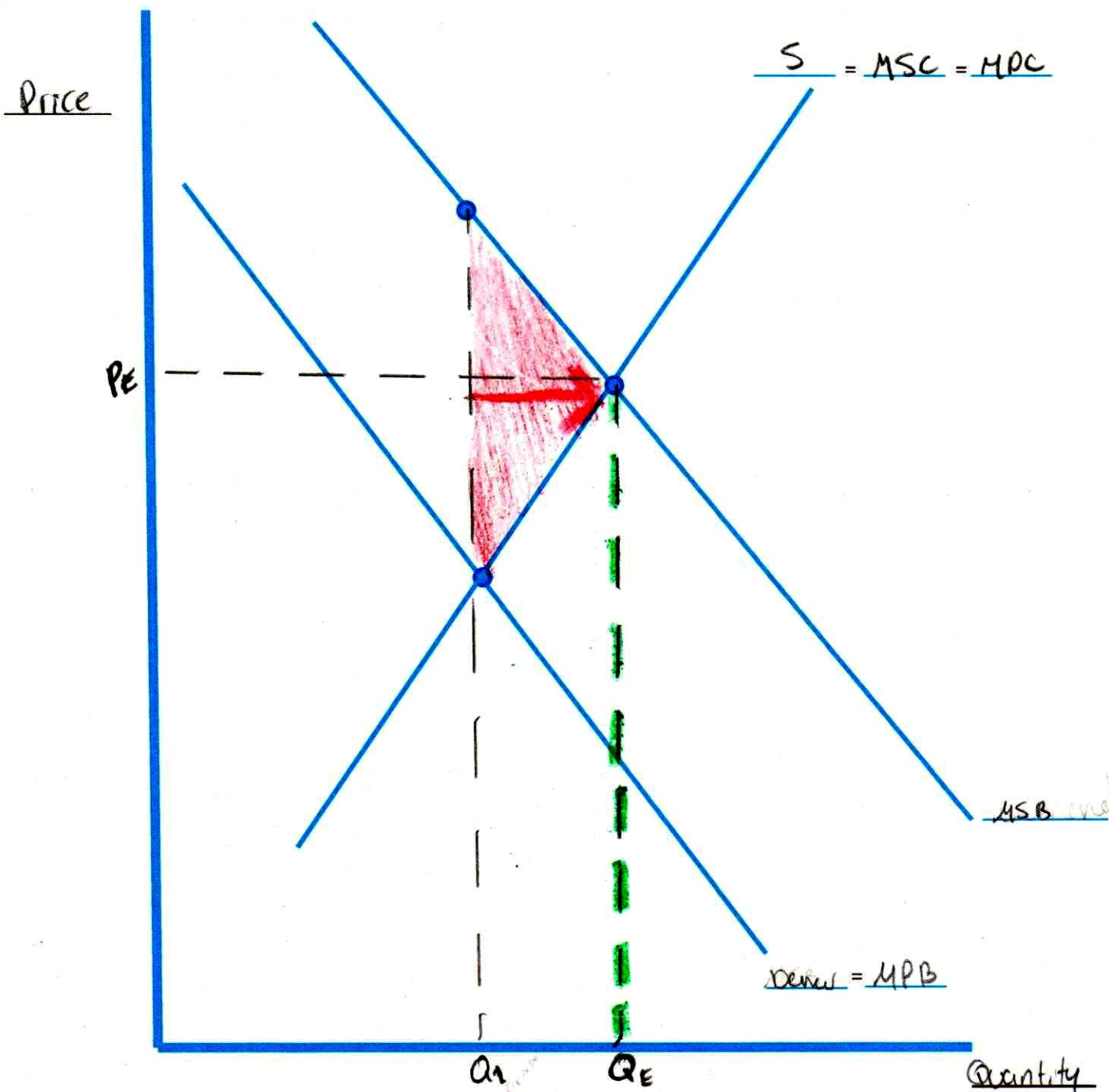
1. Correctly label the axes and curves on the graph
2. Find the profit maximizing point and label the profit maximizing quantity and price on the axes
3. Use the red dots to create a "U-shaped" ATC curve (with its minimum point where it crosses MC) that illustrates a normal profit and label it ATC. Label the profit-maximizing ATC on the vertical axis
4. Outline the firm's total revenue rectangle in blue and completely shade the firm's total cost rectangle green.
5. What market structure does this illustrate if this is the long-run equilibrium? *Break even*

Market for Widgets in the United States



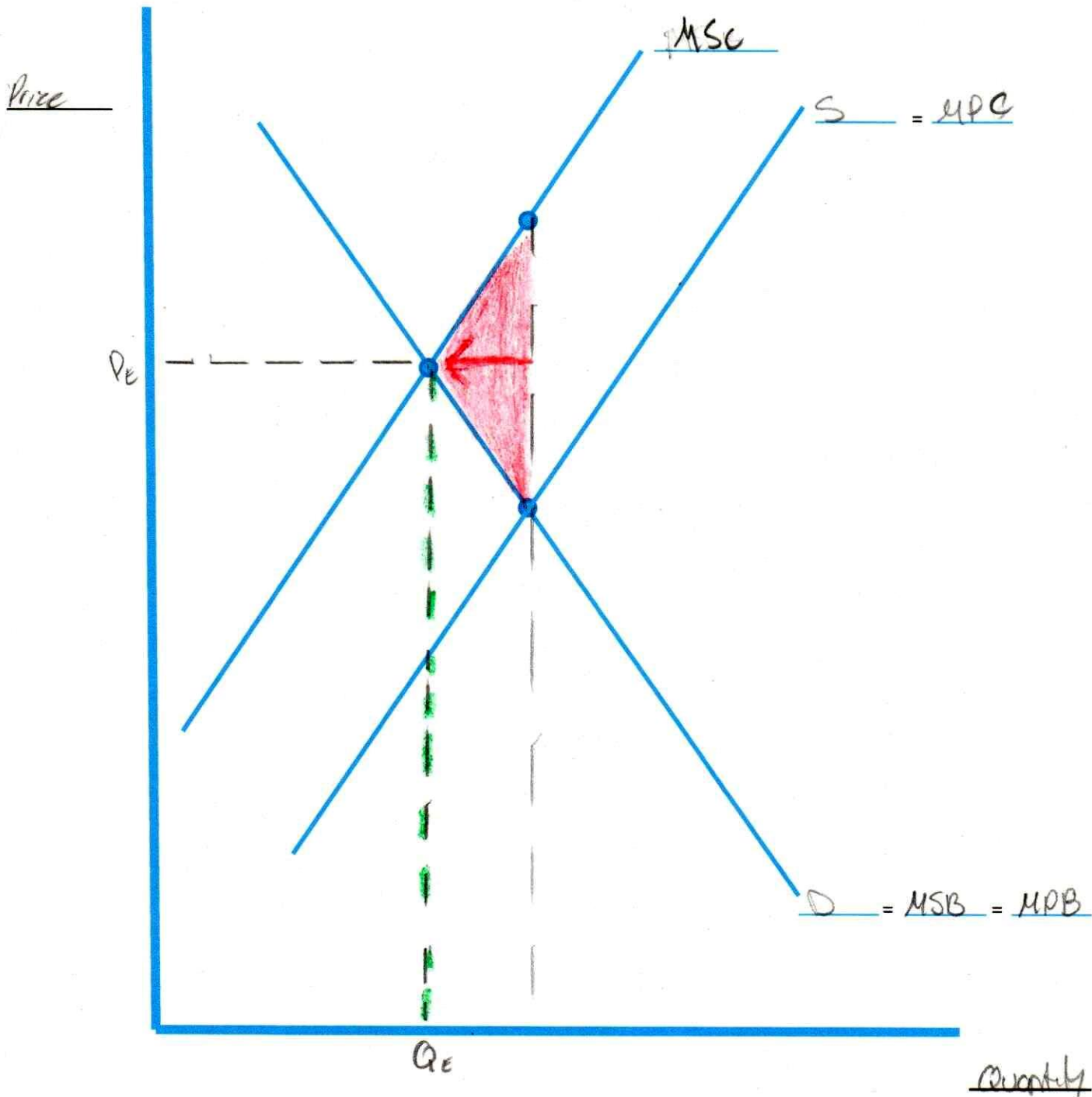
1. Correctly label the axes and curves on the graph
2. Find the profit maximizing point and label the profit maximizing quantity and price on the axes
3. Find the allocatively efficient point and label the efficient price and quantity on the axes
4. Outline consumer surplus at the efficient quantity in red
5. Completely shade consumer surplus at the monopoly quantity in blue
6. Completely shade deadweight loss from monopoly in green

Positive Externalities
A Market with External Benefits (e.g. Externalities)



1. Correctly label the axes D, S, MPC, MPB, MSC and MSB curves on the graph
2. Label the market equilibrium price and quantity on the axes using blue
3. Label the efficient price and quantity on the axes in black
4. Draw a green line that represents the MEB at the market equilibrium quantity
5. Completely shade the area of deadweight loss in red
6. Add a red line to make your DWL triangle into an arrow pointing toward efficiency (just for fun)!

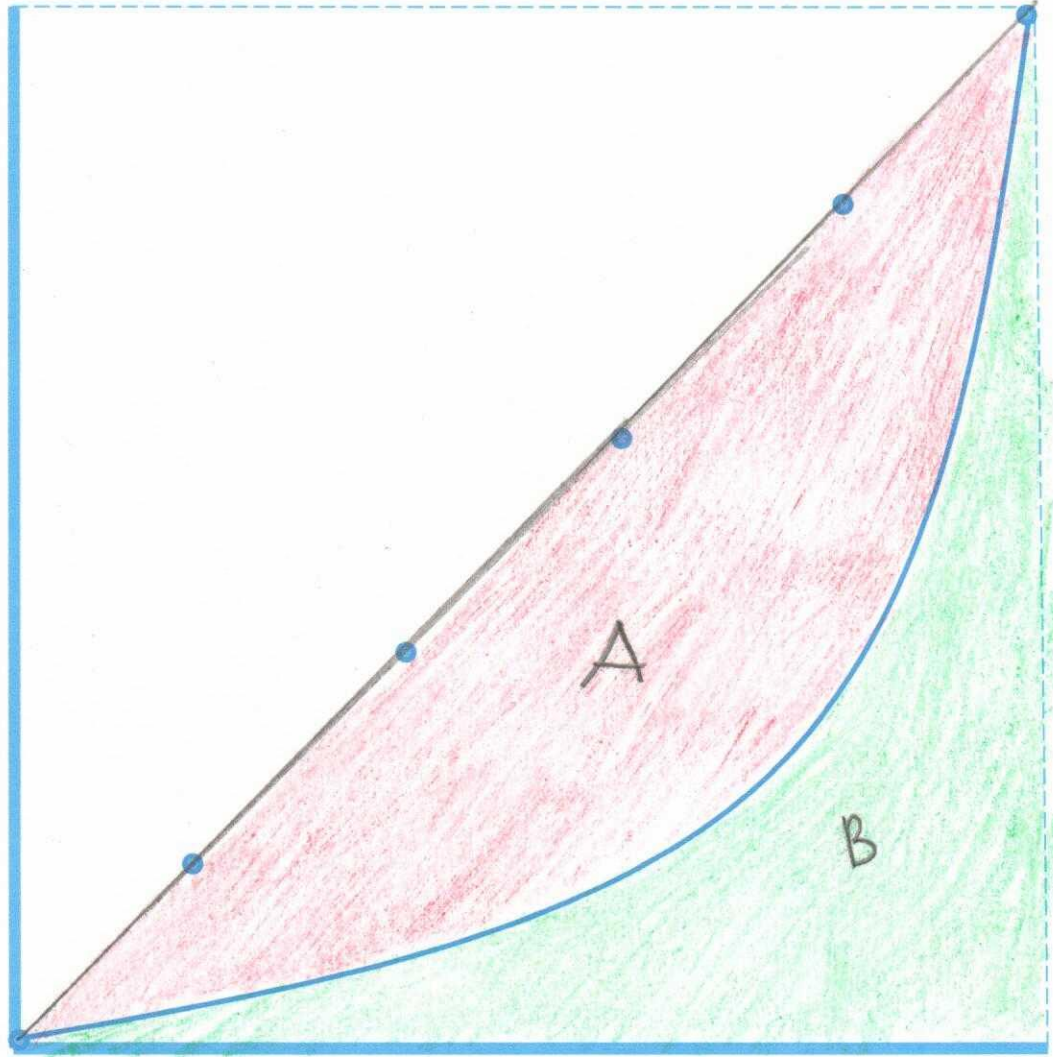
A Market with External Costs (e.g. Negative Externality)



1. Correctly label the axes, D, S, MPC, MPB, MSC and MSB curves on the graph
2. Label the market equilibrium price and quantity on the axes in blue
3. Label the efficient price and quantity on the axes in black
4. Draw a green line that represents the MEC at the market equilibrium quantity
5. Completely shade the area of deadweight loss in red
6. Add a red line to make your DWL triangle into an arrow pointing toward efficiency (just for fun)!

The Lorenz Curve

Cumulative % shared
income earned



Cumulative % of people
(lowest to highest
income)

1. Correctly label the axes in blue
2. Connect the dots with blue to create the 45 degree line of equality (where the values on the axes are equal)
3. Completely shade the distance between the line of equality and the Lorenz Curve in red and label it area "A"
4. Completely shade the remainder of the area on the graph below the Lorenz curve in green and label it area "B"
5. The Gini coefficient is equal to area A/area B. As the Lorenz curve moves to the right, is the income distribution farther from or closer to the line of equality? What happens to Area A and the Gini coefficient as the Lorenz curve moves to the right?