

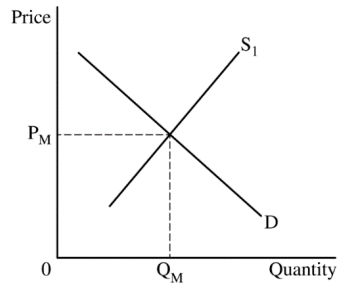
Question 1: Long

10 points

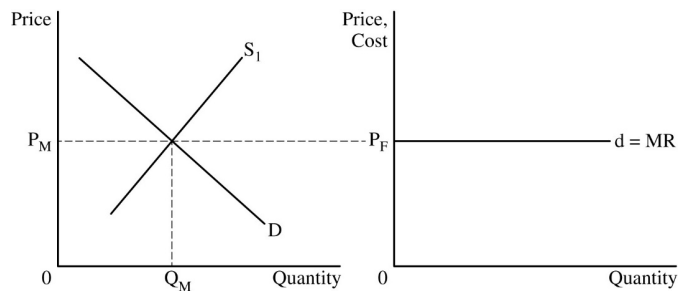
A Draw a correctly labeled graph of the market for wooden desks with a downward-sloping demand (D) curve and an upward-sloping supply (S_1) curve and label the market equilibrium price as P_M and the market equilibrium quantity as Q_M . **1 point**

Point 1

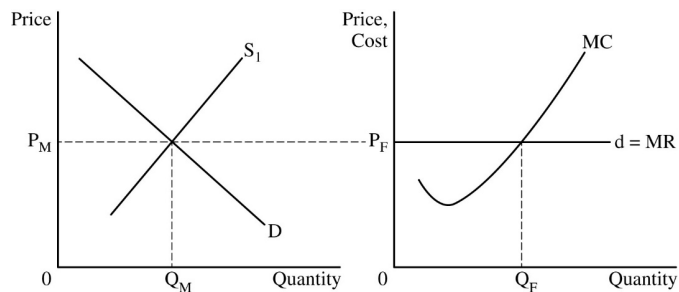
Draw a correctly labeled graph of the market for wooden desks with a downward-sloping demand (D) curve and an upward-sloping supply (S_1) curve and label the market equilibrium price as P_M and the market equilibrium quantity as Q_M .



Point 2 Draw a correctly labeled graph for Deskward that shows the firm's horizontal demand ($d = MR$) curve extended from the market equilibrium price (P_M) and label the firm's price as P_F . **1 point**

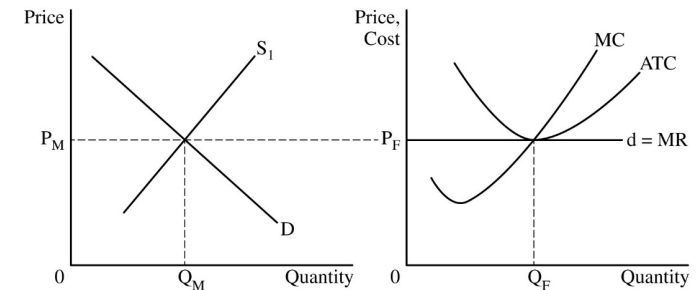


Point 3 The firm's graph must show a rising marginal cost (MC) curve, and show the firm's profit-maximizing quantity, labeled Q_F , where $MR = MC$. **1 point**



①

Point 4 The firm's graph must show the average total cost (ATC) curve tangent to the firm's $d = MR$ curve at Q_F and show the MC curve passing through the minimum point of the ATC curve. **1 point**

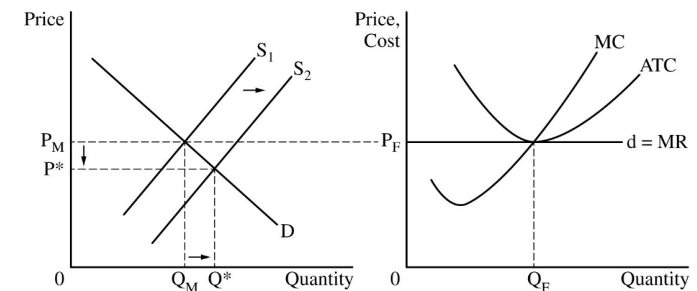


B State that Deskward's profit-maximizing quantity will not change in the short run and **1 point**

Point 5 explain that a change in a fixed cost does not affect the firm's marginal cost or marginal revenue.

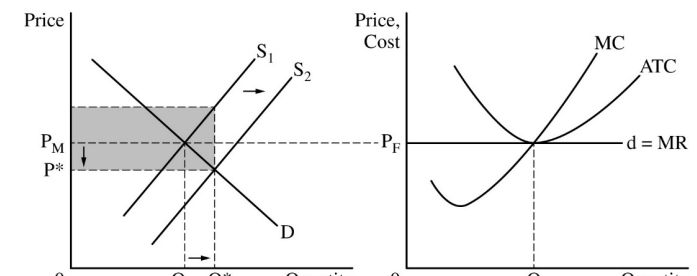
C (i) The market graph from part A must show a rightward shift of the market supply curve and show the new market equilibrium price of wooden desks, labeled P^* , and the new market equilibrium quantity of wooden desks, labeled Q^* . **1 point**

Point 6



(ii) The market graph from part A must show the area representing the total cost of the subsidy to the government, shaded completely.

Point 7



②

D Point 8	State that the price floor will result in a surplus of wooden desks and explain that the binding price floor is set above the market equilibrium price, which causes the quantity supplied of wooden desks to be greater than the quantity demanded of wooden desks.	1 point
E Point 9	(i) Calculate the long-run average total cost (LRATC) as \$160 per chair and show your work. $\text{LRATC at 500 chairs} = \frac{\$80,000}{500} = \$160$	1 point
E Point 10	(ii) State that Deskward is experiencing diseconomies of scale and explain that as output increases from 500 to 600 chairs, its LRATC increases from \$160 to \$180 (= \$108,000/600) per chair.	1 point