

1.2 - Linear Functions

Course: Math 116 - 16
Due: January 24, 2017

Name:

28 Suppose that the demand and price for strawberries are related by $p = D(q) = 5 - 0.25q$, where p is the price (in dollars) and q is the quantity demanded (in hundreds of quarts). Suppose that the price and supply of strawberries are related by the equation $p = S(q) = 0.25q$.

a. Find the price at each level of demand: 0 quarts, 400 quarts, 840 quarts.

b. Find the quantity demanded for the strawberries at each price: \$4.50, \$3.25, \$2.40.

c. Graph the demand function.

d. Find the quantity supplied at each price: \$0.00, \$2.00, \$4.50.

e. Graph the supply function the same figure as before.

f. Use algebra to find the equilibrium quantity and the equilibrium price.