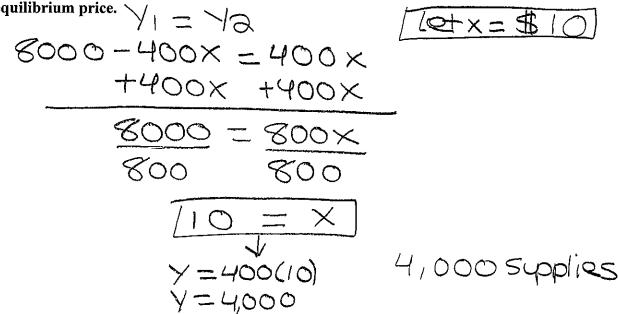
Name	
Unit 2	

## AIM: Solving word problems involving systems of equations-Day 2

13. Monthly demand for Curious George's is given by the equation y = 8000 - 400x, while monthly supply is given by the equation y = 400x, where x is the price in dollars. Find the price where the supply equals the demand, the **equilibrium price**.



Equilibrium Price: the supply of an item is equal the quantity demanded.

14. A grocer will supply y pounds of ground beef per day when the retail price is x dollars per pound, where y = 200x + 60. Consumer studies show that consumer demand for ground beef is y pounds per day, where y = -150x + 900. What is the price at which the supply is equal to the demand, the equilibrium price?

Let 
$$x = 200x + 60 = -150x + 900$$

\$ of supply  $+150x$ 

Let  $y = 40f$ 
 $350x + 60 = 900$ 

Let  $y = 40f$ 
 $350x = 840$ 
 $350x = 840$