Problem 1. Charles and Donna paint a house together. If they work without a break, then they will finish in 30 hours. If Charles quits painting when the job is half done, then it takes a total of 50 hours to paint the house. Assuming that Charles and Donna paint at a constant rate, how many hours will it take for Charles to paint the entire house if he does it alone?

Solutions due by 10:00am Tuesday, September 2.