

(1) [7] A person has \$140,000 to invest and two investments are available. One pays 7% interest per year while the second only pays 4% per year. How should the \$140,000 be split between the two investments in order to earn a total of \$7100 in interest income over a one year period?

(2) [8] For a certain commodity the supply equation is $S = 2p + 5$. At a price of \$1 there is a demand for 19 units. If the market price is \$3 determine the demand equation assuming it is linear.

Graph both the supply and demand equations.