Situation: James contacts two moving companies about relocating to a new house a few blocks down the street. Each company provides him with estimates that can be modeled by the following equations.

\[ y = 25x + 100 \]  \(\text{where } x = \text{number of man-hours, and}\)
\[ y = 20x + 150 \]  \(y = \text{total cost, and the constant represents the cost of the moving truck}\)

Part A) Solve the equations as a system in order to determine at what point the cost of moving would be the same with either company.
Part B) Suppose that James’ move took a total of 15 man-hours. How much money will he have saved if he chose the “right” moving company? Show all work.

Part C) Before James decides on which moving company to use, he gets two more estimates from other companies. One company says it only charges $18 per man-hour in addition to a flat fee of $175 for use of a truck. The other company charges $32 per man-hour and does not have an extra charge for the use of a truck. Write two equations that can model these estimates in terms of the total cost.