

Ford Trucks¹

Ford manufactures two truck models, the F-150 and the F-250. Each truck made goes through the painting shop and the assembly shop. If the painting shop were completely devoted to painting F-150 trucks, 650 trucks could be painted per day, whereas if the painting shop were completely devoted to painting the F-250 model, 550 trucks could be painted per day. If the assembly shop were devoted to assembling F-150 engines, 1400 trucks could be assembled per day. Meanwhile, if the assembly shop were completely devoted to making F-250 engines, 1000 per day could be assembled. However, it is possible to paint both truck models in the painting shop and assemble both types in the assembly shop. Each F-150 contributes \$2500 to profit while each F250 contributes \$3000 to profit. Utilize Solver to maximize the company's profit.

¹ This exercise problem and related solutions were originally developed by Athira Praveen based on Practical Management Science 5th Edition. This current revision was revised by Nowed Patwary.