

Linear Programming - II

Problem A factory manager wishes to order two types of machines. Model X costs \$6,000 each and model Y costs \$8,000 each. The budget available for buying new machines is \$48,000 and the space in the workshop can accommodate at most 7 new machines. Suppose the manager buys x model X machines and y model Y machines.

1. Write down all the restrictions on x and y . (Reminder: The manager cannot buy π model X machines.)
2. Find graphically all the possible pairs of values of x and y .