

Example 28. A carpenter has started a workshop in which he manufactures handcarts. Each cart consists of a frame and two wheels. A frame uses 3 hours and a wheel 2 hours of labour of which 90 hours per week are available. The carpenter wants that he should manufacture at least 10 carts during a week. The cost of frame is ₹ 500 and that of a wheel is ₹ 200. Formulate this as a linear programming model and using graphic method, determine an optimal production plan.

[Delhi Univ. B.Com. (H) 2004]