1. **Information Technology (IT)**

A software company wishes to maximize its profits by developing two types of products: mobile applications and enterprise software. Each hour dedicated to developing mobile applications generates a profit of $100, while each hour dedicated to developing enterprise software generates a profit of $150. The company has a total of 40 hours available per week for developing these products. Additionally, according to the company's quality standards, at least 30% of the time must be allocated to developing enterprise software. How many hours should be dedicated to each type of product to maximize profits?

1. **Agricultural Sector**

A farmer has 100 hectares of land to cultivate wheat and corn. Each hectare of wheat produces a profit of $200, while each hectare of corn produces a profit of $300. Each hectare of wheat requires 3 units of fertilizer, and each hectare of corn requires 4 units of fertilizer. The farmer has a maximum of 360 units of fertilizer. How many hectares should be allocated to each crop to maximize profits?

1. **Manufacturing Industry**

A factory produces two types of chairs: wooden chairs and metal chairs. Each wooden chair generates a profit of $30, and each metal chair generates a profit of $50. Producing a wooden chair takes 2 hours, and producing a metal chair takes 3 hours. The factory has a maximum of 240 hours available per week for chair production. How many wooden and metal chairs should be produced to maximize profits?

1. **Service Industry**

A cleaning service company offers two types of services: office cleaning and home cleaning. Each office cleaning service generates $400 in revenue, while each home cleaning service generates $250 in revenue. The company has a maximum of 20 hours available per day for these services. Cleaning an office takes 4 hours, and cleaning a home takes 3 hours. How many office and home cleaning services should the company perform to maximize its revenue?

1. **Educational Sector**

A language academy offers English and French courses. Each English course generates $500 in revenue, while each French course generates $600 in revenue. Each English course lasts 30 hours, and each French course lasts 40 hours. The academy has 400 hours available per month for offering these courses and wants to offer at least 3 courses of each language. How many English and French courses should the academy offer to maximize its monthly revenue?