1. A farmer has 300 feet of fence. He wants to construct a rectangular corral for his horses. He wants the area of the enclosed space to be 700 square feet. What is the length and width of the enclosure?
2. A farmer has 300 feet of fence. He wants to construct a rectangular corral for his horses. Fortunately, he can use a river at the boundary of his property to be one boundary for his corral. He wants his corral to have a total area of 1000 square feet. What is the length and width of the corral?
3. What would be the length and width of the corral for problem \#2 to have the maximum possible enclosed area? What is the maximum area?
