

Problem Solving Using Arrays (Maximize and Minimize)

Example #1: A farmer wishes to build a rectangular pen for his animals out of 40 feet of fencing. What should be the length and width of pen so that its area is as great as possible?

Example #2: There are 50 apple trees in an orchard. Each tree produces 800 apples. For each additional tree planted in the orchard, the output per tree drops by 10 apples. How many trees should be added to the existing orchard in order to maximize the total output of trees?