Math 1101: Examples for Section 2.1:

1. If a linear depreciation model for automobiles shows that the value of the car after $t$ years is represented by the function $y = -1245 \, t + 33500$, after how many years will the value of the car be $18560$? Solve both algebraically and graphically.

2. In order to get an “A” Jane must have a “90” average on four tests. She has scores of 98, 81, & 89 on the first 3 tests. What must she score on the fourth test to get an A?

3. A company made a charitable donation of $5$ million, which was $12\%$ of the company’s annual revenue. How much was the company’s annual revenue?

4. Concerned about the feral cat population on an island, the residents trapped 15 cats, spayed or neutered them and released them. A month later they trapped 8 cats and found that 5 of them had been spayed or neutered. Estimate the total number of feral cats living on the island.