**CS5250 Advanced Operating Systems**

**Pop Quiz 2**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write the snippet of x86-64 assembly code that will compute the polynomial:

*a* = 3*x*3 – 4*x*2 + *x* – 7

where “*a*” is **%rax** and *x* is in the memory location pointed to by **%rbp**. Both *a* and *x* are 64-bit integers. You may assume that all registers other than **%rbp**, **%rsp** and **%rip** are available for your use. The final answer is to be left in **%rax**.