232 Quiz 7

October 28, 2011

Section: _____ **Name:** _____

Work individually. You may use your Notebooks but no other materials and no technology.

1. The functions $A(x) = \int_0^x t^3\,dt$ and $B(x) = \int_2^x t^3\,dt$ differ by a constant. Explain why in three different ways:

a) By comparing the derivatives of $A(x)$ and $B(x)$.

b) By showing algebraically that $A(x) - B(x)$ is a constant.

c) By interpreting $A(x) - B(x)$ graphically in terms of area.