## Quiz 7: Thursday, March 5, 2015

To receive full credit, show all work necessary to justify answers and all steps of proofs and derivations clearly, in logical sequence, using notation developed in class. Partial credit will be given only for significant progress toward a solution.

A family wishes to accumulate $\$ 100,000$ in a college fund at the end of 18 years. They plan to deposit $\$ 2000$ at the end of every year for 14 years and $\$ 2000+X$ at the end of each of the last 4 years. Find $X$ if the fund earns $9 \%$ effective per annum.

