Numerical Analysis (630262) Section 2: Quiz (2) $1^{\text {st }}$ 2014-2015

Name: No.

It is required to apply $3^{\text {rd }}$ Newton interpolating polynomial for the following data to approximate $\mathrm{f}(8.25)$. Then find the $1^{\text {st }}$ order general polynomial and compare your results. What conclusion can you make?

| Data point Number <br> $k$ | Annual Interest Rate <br> $i_{k}$ | Monthly Payment <br> $A_{k}=f\left(i_{k}\right)$ |
| :---: | :---: | :---: |
| 0 | $7 \%$ | $\$ 665.30$ |
| 1 | $10 \%$ | $\$ 877.57$ |
| 2 | $8 \%$ | $\$ 733.76$ |
| 3 | $9 \%$ | $\$ 804.62$ |

