<u>Worksheet 2015-10ℰI-00006(2)</u>   Financial Mathematics – Mixed exercise

[Where necessary, round off to 2 decimals.]

(1) A bank offers the following possibilities:

(a) Simple interest at 12% pa for 6 years.
(b) Simple interest at 1,25% per month for 5 years.
(c) Compound interest at 9% pa for 6 years, annually compounded.
(d) Compound interest at 10% pa for 5 years, half-yearly compounded.
Which of the above will be the best option for an investment of R100 000?

(2) One British pound costs R13,50 and one American dollar costs R7,24. Calculate the exchange rate between the British pound and the American dollar.

(3) Ronald decided to invest R30 000 overseas eight years ago. He invested it in Britain at a fixed rate (in Britain) of 3% pa compound interest. When he invested it 8 years ago the exchange rate was £1 = R10,47. How much rand will be paid out if the current exchange rate is £1 = R13,28? Do you think it was a wise decision to invest the money in Britain and is it a good time to draw the money now?