MATH 371-03 (181)
HW # 1
Due on Tuesday 18/9/2018

Q1.Problem 4 (a) (c) textbook page 25

Q2. Let $f(x) = 2.753x^3 - 2.958x^2 + 3.169x - 4.675$

(a) Write $f(x)$ in nested form.

(b) How many **multiplications** are there in the usual form?

(c) How many **multiplications** are there in the nested form?

(d) Evaluae $f(x)$ at $x = 1.077$ using: exact arithmetic, 3-digit chopping, and 3-digit rounding

(e) Determine the absolute error and the relative error for each evaluation.

Q3. Evaluate the following function at $x = \pi$ using 3 digit rounding arithmetic:

$$f(x) = \frac{x^2 + 10\cos x}{4x}$$