Non-life — Assignment X

Y* and Z†

September 15, 2016

Question 1

The power of LaTeX lies in easy and beautiful typesetting of complicated formulas like

$$\sum_{n=0}^{\infty} x^n = \frac{1}{1-x},$$

or

$$\int_{-\pi}^{\pi} \sin\left(\frac{x}{2} + \pi\right) \mathrm{d}x = 0,$$

or

$$\begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \end{pmatrix} \begin{pmatrix} 1 \\ 1 \\ 1 \end{pmatrix} = \begin{pmatrix} 6 \\ 15 \end{pmatrix}.$$

In an `align*` environment (included in package `amsmath`) the characters following the tab-sign & are aligned:

$$\begin{aligned} (1-x)(1 + x + x^2 + \ldots + x^n) &= 1 - x + x - x^2 + x^2 - \ldots + x^n - x^{n+1} \\ &= 1 - x^{n+1}. \end{aligned}$$

Question 2

The `verbatim` environment serves to typeset source code, or output, of programs:

```
> X <- c(100, 120, 80, 80, 120)
> mean(X); sd(X)
[1] 100
[1] 20
```

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*Student number: 00000000
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Question 3

A centered graph in encapsulated postscript (.eps) format as produced by R:

$$\backslash includegraphics[scale=.6]IG.eps$$

Other file formats like .jpg work as well:

$$\backslash includegraphics[scale=.6]Poisson.jpg$$
Siméon Denis Poisson (21 June 1781 – 25 April 1840)

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