1 First section

Here's an inline formula: $E = mc^2$, and here's the same thing displayed:

$$E = mc^2.$$

Here's one that's displayed and labelled:

$$\lim_{a \to \infty} \int_0^a \exp(-x^2) \, dx = \sqrt{\pi}/2. \tag{1}$$

Here's a reference to eq. (1).

With package `amssymb`, we can use special symbols such as $\mathbb{R}$.

2 Second part

With package `graphicx`, we can put in pictures. It's a `.jpg` graphics file
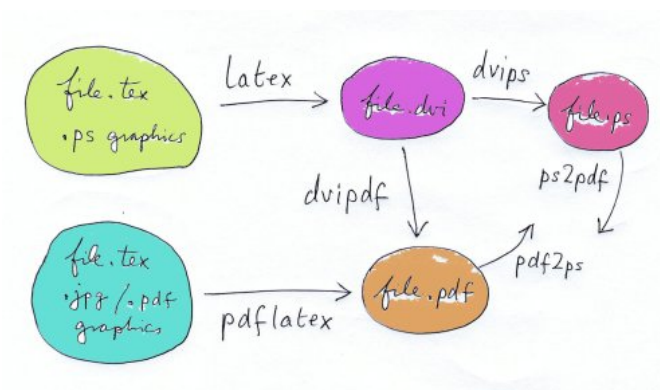

Figure 1: This is a caption.

in Fig. 1, so this `.tex` file must be compiled ('built') with the command or menu button *pdflatex*. Then it produces a viewable and printable `.pdf` file.