

**Package name:** `stix` (STIX)

**Derived from:** Times

**Weights and shapes:** {m, b}, {n, it}.

**Features:**

- full set of f-ligatures;
- No SMALL CAPS—better to use another Times package for text;
- monospaced lining figures 0123456789;
- taboldstyle (monospaced) figures 0123456789 are available only through `textcomp` commands;
- vast number of math glyphs available, but not all are accessible using  $\text{\LaTeX}$ .

**Typical invocation:**

```
\usepackage[lcgreekalpha]{stix} %[notext], and load another package for text?
\usepackage{textcomp}
```

**Example using this preamble:**

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The typeset math below follows the ISO recommendations that only variables be set in italic. Note the use of upright shapes for  $d$ ,  $e$  and  $\pi$ . (The first two are entered as `\mathrm{d}` and `\mathrm{e}`, and in fonts derived from STIX, the latter is entered as `\mathrm{\pi}`, which works only if you set the option `lcgreekalpha`, which makes lower case Greek letters respond to alphabet changes such as `\mathrm` and `\mathbf`.)

**Simplest form of the *Central Limit Theorem*:** Let  $X_1, X_2, \dots$  be a sequence of iid random variables with mean 0 and variance 1 on a probability space  $(\Omega, \mathcal{F}, \mathbb{P})$ . Then

$$\mathbb{P}\left(\frac{X_1 + \dots + X_n}{\sqrt{n}} \leq y\right) \rightarrow \mathfrak{N}(y) := \int_{-\infty}^y \frac{e^{-t^2/2}}{\sqrt{2\pi}} dt \quad \text{as } n \rightarrow \infty,$$

or, equivalently, letting  $S_n := \sum_1^n X_k$ ,

$$\mathbb{E}f\left(S_n/\sqrt{n}\right) \rightarrow \int_{-\infty}^{\infty} f(t) \frac{e^{-t^2/2}}{\sqrt{2\pi}} dt \quad \text{as } n \rightarrow \infty, \text{ for every } f \in \mathcal{BC}(\mathbb{R}).$$