

TikZ drawing



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```
\path[fill=yellow,draw=yellow!75!red]
(0,0) circle (1cm);
\fill[red] (45:5mm) circle (1mm);
\fill[red] (135:5mm) circle (1mm);
\draw[line width=1mm,red]
(215:5mm) arc (215:325:5mm);
```



## textformat

Typeset text as bold, italic, or both.

See *textcolor*<sup>on p 4</sup>.

`\textbf{text}`  
`\textit{text}`  
`\bfseries`  
`\mdseries`  
`\itshape`  
`\upshape`

### Text formatting – commands

c.1

`\raggedright` Normal text,  
`\textbf{bold text}`,  
`\textit{italic text}`,  
`\textbf{\textit{bold italic text}}`. Back to normal text.  
`\textsc{Small Caps}`

Normal text, **bold text**, *italic text*, ***bold italic text***. Back to normal text.

### Text formatting – switches

c.2

`\raggedright` Normal text,  
`\bfseries` bold text, `\itshape` bold italic text, `\upshape` back to upright bold,  
`\mdseries` `\itshape` now some italics, `\upshape` and back to normal text.

Normal text, **bold text**, ***bold italic text***, back to **upright bold**, *now some italics*, and back to normal text.

The command

`\textit{italic text}` (1)

switches to italics locally:

`\textit[1]{\itshape#1}` (2)

## fontfamily

Set text in a particular font family: serif (roman), sans-serif, mono-spaced.

```
\textsf{text}  
\texttt{text}  
\rmfamily  
\sffamily  
\ttfamily
```

### Font families – commands

c.3

```
\raggedright Serif text (roman)  
abfgy 123, \textsf{sans text  
abfgy 123},  
\texttt{mono-spaced text abfgy  
123}, back to normal text.
```

Serif text (roman)  
abfgy 123, sans text  
abfgy 123,  
mono-spaced text  
abfgy 123, back to  
normal text.

### Font families – switches

c.4

```
\raggedright Serif text (roman)  
abfgy 123, \sffamily sans text  
abfgy 123, \ttfamily  
mono-spaced text abfgy 123,  
\rmfamily back to normal text.
```

Serif text (roman)  
abfgy 123, sans text  
abfgy 123,  
mono-spaced text  
abfgy 123, back  
to normal text.

## Boxes – mbox

c.5

```
Some text \mbox{a a a a a a} b b b b b  
b b b b b b b b
```

Some text  
a a a a a a b  
b b b b b b b b  
b b b

## Boxes – fbox

c.6

```
\raggedright Some \fbox{text} in a frame.
```

Some text in a  
frame.

## colorbox

Put text on a coloured background.

See *fcolorbox*<sup>on p 4</sup>.

**`\colorbox`**{text-background-colour}{text}

### Boxes – colorbox

c.7

```
\raggedright Some coloured  
  \colorbox{yellow!50}{  
    \textcolor{red}{text} }.
```

Some coloured  
**text** .

See code example c.8<sup>on p 4</sup> for the framed version.

## fcolorbox

Draw a coloured frame around text on a coloured background.

See *colorbox*<sup>on p 4</sup>.

**`\fcolorbox`**{frame-colour}{text-background-colour}{text}

### Boxes – fcolorbox

c.8

```
\raggedright Some framed \&  
  coloured  
  \fcolorbox{blue}{yellow!50}{text}.
```

Some framed &  
coloured **text** .

## textcolor

Typeset coloured text.

See *textformat*<sup>on p 2</sup>.

**`\textcolor`**{text-colour}{text}

### Text – textcolor

c.9

```
\raggedright Some coloured  
  \textcolor{red}{red text} and  
  some \textcolor{blue}{blue  
  text}.
```

Some coloured **red**  
**text** and some **blue**  
**text**.

## adjusting boxes


Change the rule width, and the separator width between rule and text.

```
\setlength{\fboxrule}{length}  
\setlength{\fboxsep}{length}
```

### Boxes – fboxrule

c.10


```
\setlength{\fboxrule}{3pt}  
\raggedright Some framed \&  
coloured  
    \fcolorbox{blue}{yellow!50}{%  
    \textcolor{red}{text}}.
```

Some framed &  
coloured .

### Boxes – fboxsep

c.11

```
\setlength{\fboxrule}{3pt}  
\setlength{\fboxsep}{0pt}  
\raggedright Some framed \&  
coloured  
    \fcolorbox{blue}{yellow!50}{%  
    \textcolor{red}{text}}.
```

Some framed &  
coloured .

## Lists – enumerate

c.12

```
\begin{enumerate} \item xxx \item xxx  
  \begin{enumerate} \item yyy \item yyy  
    \begin{enumerate} \item zzz \item zzz  
      \item zzz\end{enumerate} \item  
yyy\end{enumerate} \item  
xxx\end{enumerate}
```

1. xxx
2. xxx
  - (a) yyy
  - (b) yyy
    - i. zzz
    - ii. zzz
    - iii. zzz
- (c) yyy
3. xxx

Lists – itemize	c.13
<pre> \begin{itemize} \item xxx \item xxx   \begin{itemize} \item yyy \item yyy     \begin{itemize} \item zzz \item zzz       \item zzz\end{itemize} \item yyy\end{itemize} \item xxx\end{itemize} </pre>	<ul style="list-style-type: none"> <li>• XXX</li> <li>• XXX <ul style="list-style-type: none"> <li>– yyy</li> <li>– yyy <ul style="list-style-type: none"> <li>* ZZZ</li> <li>* ZZZ</li> <li>* ZZZ</li> </ul> </li> </ul> </li> <li>– yyy</li> <li>• XXX</li> </ul>
Lists – description	c.14
<pre> \begin{description} \item[doe] `a deer, a female deer' \begin{description} \item[buck] the male \item[fawn] a young deer \end{description} \item[ray] `a beam of golden sun' \end{description} </pre>	<p><b>doe</b> ‘a deer, a fe- male deer’</p> <p><b>buck</b> the male</p> <p><b>fawn</b> a young deer</p> <p><b>ray</b> ‘a beam of golden sun’</p>
Section levels – section	c.15
<pre> \section{X} xxx \section*{Y} yyy \section{Z} zzz </pre>	<p><b>1 X</b></p> <p>xxx</p> <p><b>Y</b></p> <p>yyy</p> <p><b>2 Z</b></p> <p>zzz</p>

### 3    xxx

Environments – abstract		c.16
<pre>\begin{abstract} ... x x x      x x x \end{abstract}</pre>	<b>Abstract</b>	<pre>... XX X X X X</pre>

Codeline (2)<sup>on p 2</sup> is an example of locally-grouped formatting.