

## 1 Side by side figures in org-mode

adapted from <http://www.johndcook.com/blog/2009/01/14/how-to-display-side-by-side-figures>

Now you can reference Figure 3, or Figure 3(a) or Figure 3(b).

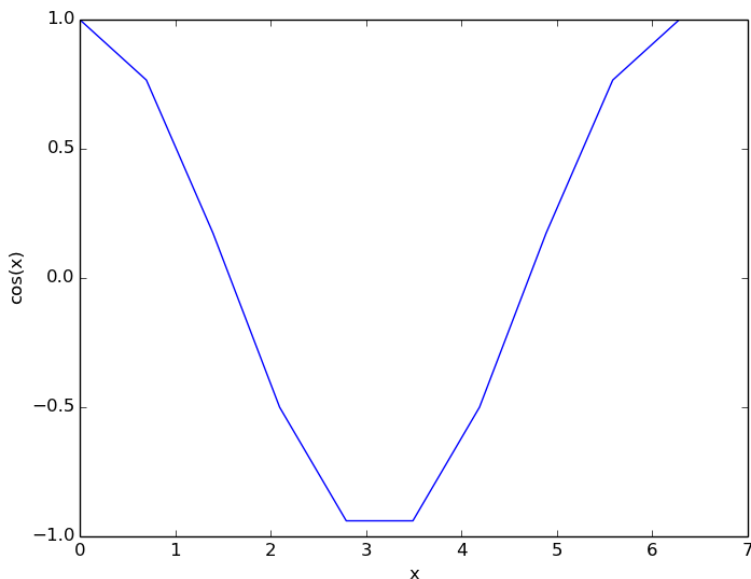


Figure 1: Left graph

Here is an alternative approach we could consider. Kind of like <http://oremacs.com/2015/01/23/eltex/>. But we could include other kinds of exports.

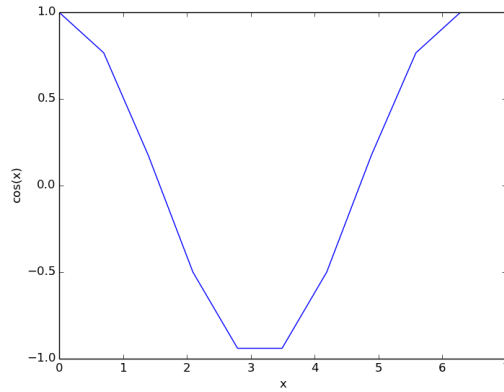
---

```
1 (figure ()
2   (subfigure (("Left graph" (label "fig:a")))
3     (includegraphics ((width . "3in"))
4       "images/cos-plot.png"))
5   "\enskip"
6   (subfigure (("Right graph" (label "fig:b")))
7     (includegraphics ((width . "3in"))
8       "images/eos-uncertainty.png"))
9   (caption
10    "Text pertaining to both graphs, " (ref "fig:a")
11    " and " (ref "fig:b") "." (label "fig12"))))
```

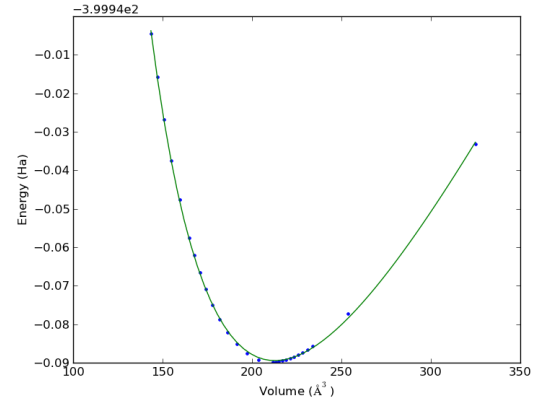
---

```
1 (defun label (arg)
2   (format "\\label{%s}" arg))
```

---



(a) Left graph



(b) Right graph.

Figure 2: Text pertaining to both graphs, [3\(a\)](#) and [3\(b\)](#).

---

```

3
4 (defun ref (arg)
5   (format "\\ref{%s}" arg))
6
7 (defun caption (&rest body)
8   (format "\\caption{%s}"
9     (mapconcat 'eval body "")))
10
11 (caption
12   "Text pertaining to both graphs, " (ref "fig:a")
13   " and " (ref "fig:b") "." (label "fig12"))

```

---

`\caption{Text pertaining to both graphs, \ref{fig:a} and \ref{fig:b}.\label{fig12}}`

---

```

1 (defun includegraphics (options path)
2   (format "\\includegraphics%s{%s}"
3     (if options
4       (format "[%s]"
5         (mapconcat (lambda (ccell)
6           (format "%s=%s"
7             (car ccell)
8             (cdr ccell)))
9           options
10          ","))
11     ""))
12   path))
13
14 (includegraphics '((width . "3in"))
15   "images/eos-uncertainty.png")

```

---

---

```

\includegraphics[width=3in]{images/eos-uncertainty.png}

1 (defun subfigure (options &rest body)
2   (format "\\subfigure%s{%s}"
3     (if options
4       (format "[%s]"
5         (mapconcat 'eval options ""))
6       ""))
7   (mapconcat 'eval body "")))
8
9 (subfigure '("Right graph" (label "fig:b")))
10   (includegraphics '((width . "3in"))
11     "images/eos-uncertainty.png"))

```

---

`\subfigure[Right graph\label{fig:b}]{\includegraphics[width=3in]{images/eos-uncertainty.png}}`

## 1.1 Figure

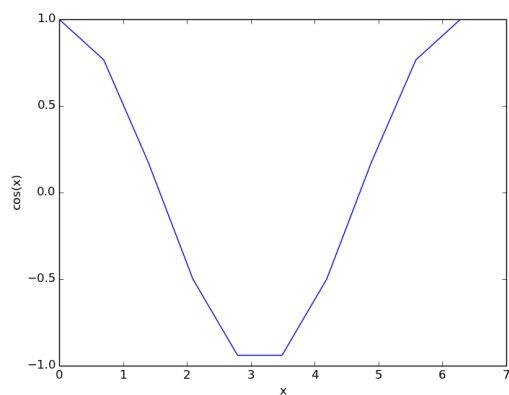
---

```

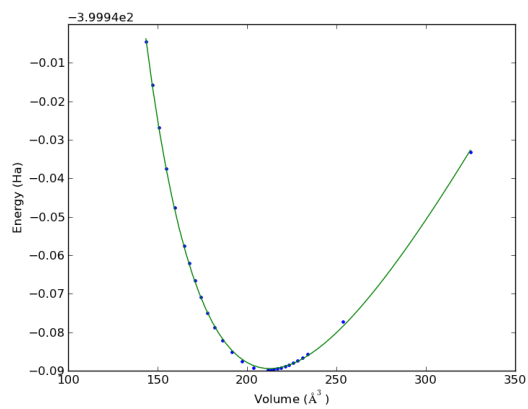
1 (defun figure (options &rest body)
2   (format "\\begin{figure}"
3     %s
4     "\\end{figure}"
5     (mapconcat 'eval body "\n")))
6
7 (figure ()
8   (subfigure '("Left graph" (label "fig:a"))
9     (includegraphics '((width . "3in"))
10       "images/cos-plot.png"))
11   "\\enskip"
12   (subfigure '("Right graph" (label "fig:b"))
13     (includegraphics '((width . "3in"))
14       "images/eos-uncertainty.png"))
15   (caption
16     "Text pertaining to both graphs, " (ref "fig:a")
17     " and " (ref "fig:b") "." (label "fig12"))))

```

---



(a) Left graph



(b) Right graph

Figure 3: Text pertaining to both graphs, 3(a) and 3(b).