



Images

L^AT_EX

S. Moghari

Shahrood University of Technology
Mathematical Sciences Department

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Outlines

1 Introduction

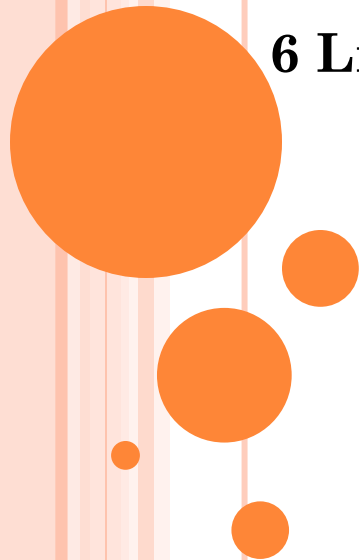
2 The folder path to images

3 Changing the image size and rotating the picture

4 Positioning image

5 Captioning, labeling and referencing

6 List of figures



Introduction

```
\usepackage{graphicx}
```

```
\includegraphics{universe}
```



The images' file name

The folder path to images

%Path in Windows format:

\graphicspath{ {c:/user/images/} }

or

\graphicspath{ {images/} }

or

\graphicspath{ {images1/} {images2/} }

Changing the image size and rotating the picture

```
\documentclass{article}
```

```
\usepackage{graphicx}
```

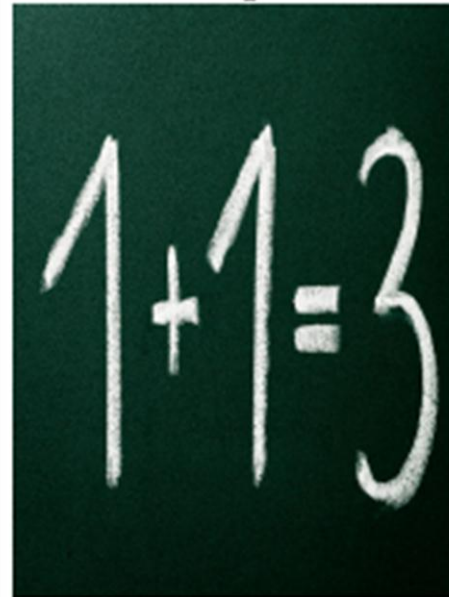
```
\begin{document}
```

There's a picture of math!

```
\includegraphics [width=3cm, height=4cm]{math}
```

```
\end{document}
```

There's a picture of math!

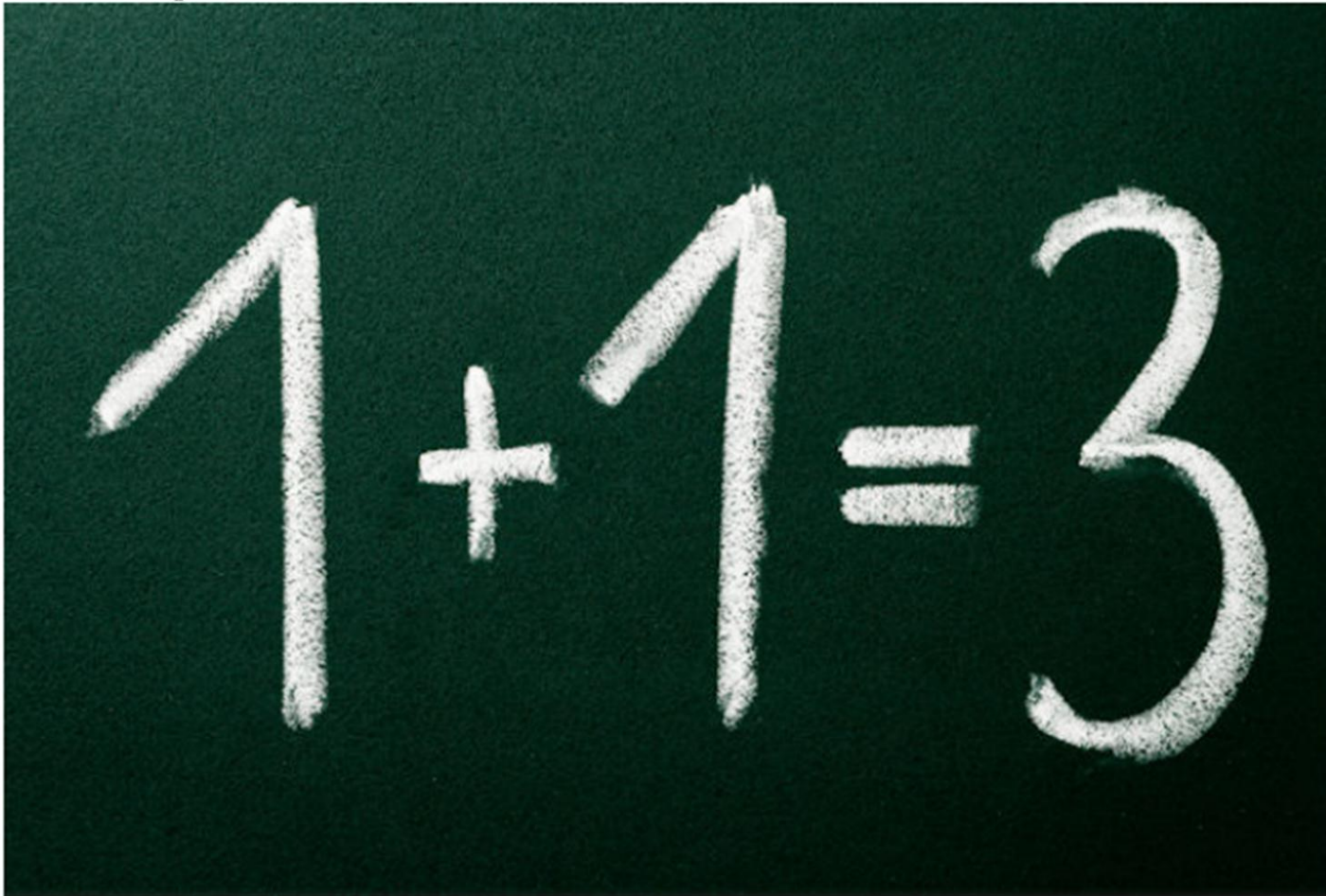


Numbering equations

There's a picture of math!

`\includegraphics [width=\textwidth]{math}`

There's a picture of math!

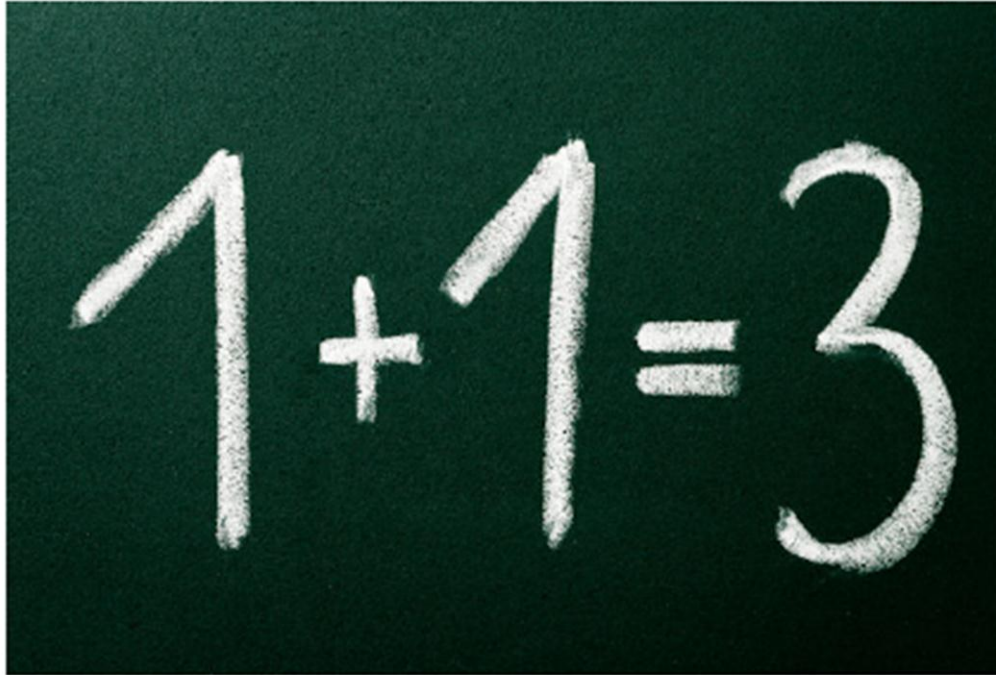


Changing the image size and rotating the picture

There's a picture of math!

```
\includegraphics [scale=1.5]{math}
```

There's a picture of math!



Changing the image size and rotating the picture

There's a picture of math!

```
\includegraphics [scale=0.5, angle=45]{math}
```

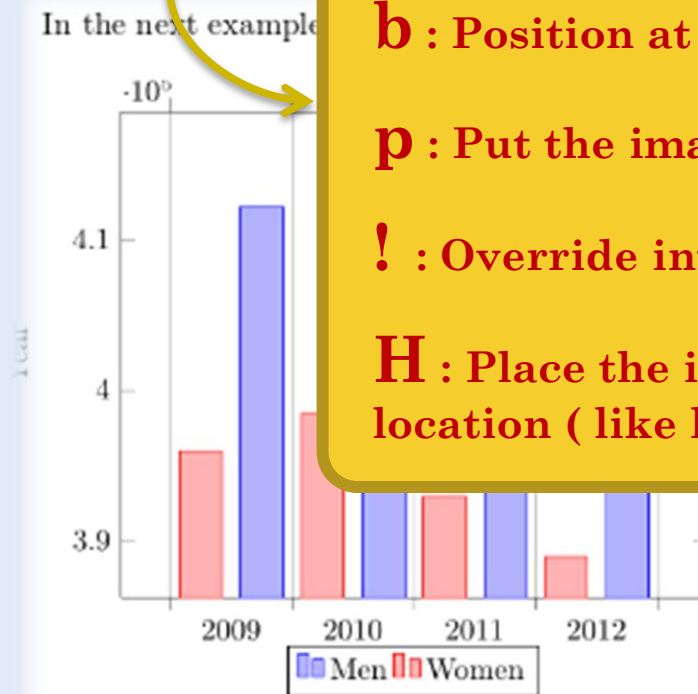
There's a picture of math!



Positioning image

In the next example the figure will be positioned right below this sentence.

```
\begin{figure}[h]  
\includegraphics[width=  
\end{figure}
```



h : place the image *here* approximately

t : Position at the *top* of the page

b : Position at the *bottom* of the page

p : Put the image in a special page

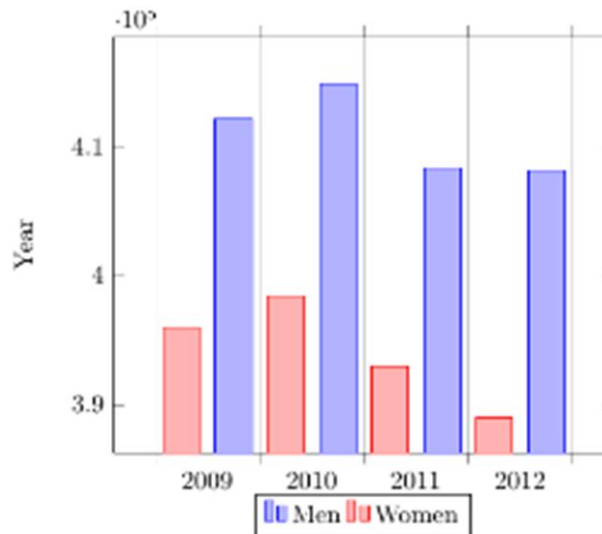
! : Override internal LATEX parameters

H : Place the image at this precise location (like h!)

Positioning image

In this picture you can see a bar graph that shows the results of a survey which involved some important data studied as time passed.

```
\begin{figure}[t]
\includegraphics[width=8cm]{Plot}
\centering
\end{figure}
```



In this picture you can see a bar graph that shows the results of a survey which involved some tricky data studied as time passed.

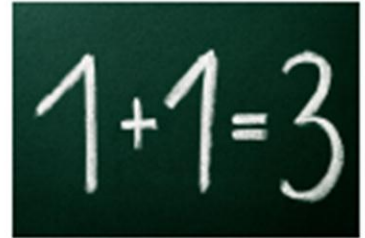
Positioning image

```
\begin{wrapfigure}{r}{0.2\textwidth}
\centering
\includegraphics[width=0.2\textwidth]{math}
\end{wrapfigure}
```

```
\usepackage{wrapfig}
```

There are several ways to plot a function of two variables, depending on the information you are interested in. For instance, if you want to see the mesh of

There are several ways to plot a function of two variables, depending on the information you are interested in. For instance, if you want to see the mesh of a function so it easier to see the derivative you can use a plot like the one on the left. On the other side, if you are only interested on certain values you can use the contour plot, you can use the contour plot, you can use the contour plot, you can use the contour plot ...


$$1+1=3$$

On the other side, if you are only interested on certain values you can use the contour plot, you can use the contour plot, you can use the contour plot, you can use the contour plot ...



Caption

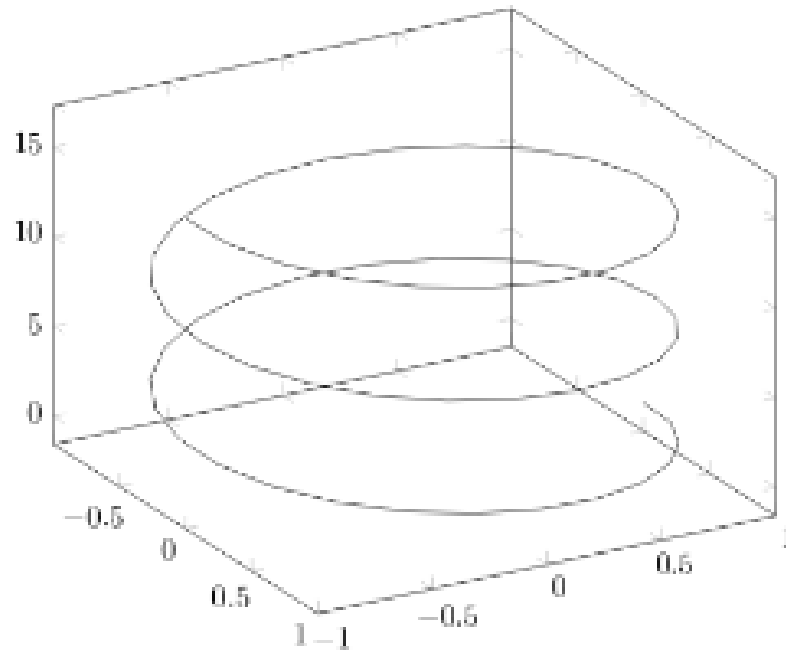
```
\begin{figure}[h]
```

```
\caption{Example of a parametric plot ( $\sin(x), \cos(x), x$ )}
```

```
\centering \includegraphics[width=0.5\textwidth]{spiral}
```

```
\end{figure}
```

Figure 1: Example of a parametric plot ($\sin(x), \cos(x), x$)



Caption

```
\begin{SCfigure}[0.5][h]
```

```
\caption{Example of a parametric plot. This caption will be on the right}
```

```
\includegraphics[width=0.6\textwidth]{galaxy}
```

```
\end{SCfigure}
```



Figure 2: Using again the picture of the universe. This caption will be on the right

Labels and cross-references

```
\begin{figure}[h]
\centering
\includegraphics[width=0.25\textwidth]{mesh}
\caption{a nice plot}
\label{fig:mesh1}
\end{figure}
```

As you can see in the figure `\ref{fig:mesh1}`, the function grows near 0. Also, in the page `\pageref{fig:mesh1}` is the same example.

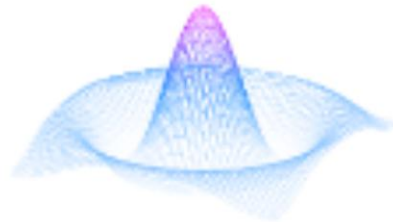


Figure 3: a nice plot

As you can see in the figure 3, the function grows near 0. Also, in the page 7 is the same example.

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The END

Thank you!

