Title On
Multiple Lines

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1 New Lines

```
\\ new line
\newline new line
% comment outside of chunks
\bigbreak Insert a blank line.  The new line will be indented
```

1.1 Examples

```
Insert a 'new line 1' after this line\\
'new line 1'\\
Insert a 'blank line below' after this line\bigbreak
This line is indented with a blank line above\\
Insert a 'blank line below' after this line\bigbreak
\noindent
This line is not indented with a blank line above\newline
```

Insert a 'new line 1' after this line
'new line 1'
Insert a 'blank line below' after this line

    This line is indented with a blank line above
Insert a 'blank line below' after this line

This line is not indented with a blank line above

2 Escaping Special Character

```
Special characters include:
_  % { } ^ \
Escape special characters by placing a backslash in front of the character.
\10_, \10%, \{10, 10\}, \10^\\
\ is an exception.  Use \textbackslash to print \
10\textbackslash
```

2.1 Examples

dataframe$Column
10_
10%
{10 10}
10^
10\

3 Spacing

```
\ in front of a space to insert a single space
\, inserts a thinspace 0.167em
\enspace inserts a 0.5em space
\quad inserts a 1em space
\quad inserts a 2em space
\qqquad qquad
\hspace{3cm} insert a blank space of specific length, i.e, 8.2em, 90pt or 3cm
\indent indent
\noindent noindent
\vspace{10mm} Starts a new paragraph by inserting a blank space between lines with
specific a length.

Math mode requires the expression and space option is bracketed with $
$a\enspace$ enspace\\
$a\quad$ quad\\
$a\qquad$ qquad\\
```

3.1 Examples

```
Text mode:
a\enspace enspace
a\quad quad
a\qquad qquad
a \hspace{3cm} 3 cm hspace
\indent indent
\noindent noindent followed by \textbackslash vspace\{5cm\}
\vspace {5mm}
new paragraph
Notice how escaping ^ with a \ places the ^ directly above the 2 in the expression n^2.
By using n\^\,2, this places and empty space between the ^ and 2
n\^2 \quad n\^\,2

Math mode with $:
$a\enspace$ enspace
$a\quad$ quad
$a\qquad$ qquad
```

Text mode:
a enspace
a quad
a qquad
a 3 cm hspace
indent
noindent followed by \vspace{5cm}

new paragraph
n$\hat{2}$ n^ 2

Math mode with $:
a enspace
a quad
a qquad

4 Verbatim

There are several ways to introduce text that won't be interpreted by the compiler. If you use the Verbatim environment, everything input between the begin and end commands are processed as if by a typewriter.
Start Verbatim use the option: \begin{Verbatim}[fontsize=\small]
End Verbatim use the option: \end{Verbatim}

4.1 Example

```
GAGTAATCCTTCACTTCAAGGCCAGTCTTCACATCTCATCAGA
ACATCTCA
 ACATCTCA
  ACATCTCA
    ACATCTCA
```

5 Specific For R outputs

```
In some case, the Signif codes may appear as gibberish.  If this occurs add the following
lines to the preamble:
\usepackage[utf8]{inputenc}
\usepackage[T1]{fontenc}
```

```
> x <- c(151, 174, 138, 186, 128, 136, 179, 163, 152, 131)
> y <- c(63, 81, 56, 91, 47, 57, 76, 72, 62, 48)
> fit <- lm(y~x)
> print(summary(fit))

Call:
lm(formula = y ~ x)
```

```
Residuals:
    Min      1Q  Median      3Q     Max
-6.3002 -1.6629  0.0412  1.8944  3.9775

Coefficients:
             Estimate Std. Error t value Pr(>|t|)
(Intercept) -38.45509    8.04901  -4.778  0.00139 **
x             0.67461    0.05191  12.997 1.16e-06 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 3.253 on 8 degrees of freedom
Multiple R-squared:  0.9548,        Adjusted R-squared:  0.9491
F-statistic: 168.9 on 1 and 8 DF,  p-value: 1.164e-06
```

```
> tab <- matrix(c(0.3,0.2,0.3,0.2),2,2)
> tab
```

```
     [,1] [,2]
[1,]  0.3  0.3
[2,]  0.2  0.2
```

```
> chisq.test(tab,correct=FALSE)
```

```
        Pearson's Chi-squared test

data:  tab
X-squared = 0, df = 1, p-value = 1
```