

2D PLOTTING IN MATLAB

FUNCTION <code>plot()</code>	
<code>plot(y)</code>	plots the columns of y versus the index of each value
<code>plot(x,y)</code>	plots vector y versus vector x
<code>plot(x,y,LineStyle)</code>	plots vector y versus vector x with line specification <code>LineStyle</code>
<code>plot(x1,y1,LineStyle1,x2,y2,LineStyle2,...)</code>	plots each vector y versus vector x on the same axes with line specifications <code>LineStyle</code>
<code>plot(x1,y1,LineStyle,'PropertyName',PropertyValue)</code>	manipulates plot characteristics by setting lineseries properties
LINE SPECIFICATION (Table 1, 2, 3)	OPTIONS
eg '-or'	grid on / grid off
eg '-.m'	xlabel('name of label x')
	ylabel('name of label y')
PROPERTIES	title('title of graph')
'LineWidth'	axis([xmin,xmax,ymin,ymax])
'MarkerSize'	axis('equal')
'MarkerEdgeColor'	axis([xmin,xmax,ymin,ymax], 'square')
'MarkerFaceColor'	legend('first','second')
	hold on / hold off

-	Solid line
--	Dashed line
:	Dotted line
-. .	Dash-dot line

+	plus	d	diamond
o	circle	^	triangle - type 1
*	star	v	triangle - type 2
.	dot	>	triangle - type 3
x	cross	<	triangle - type 4
s	square	h	hexagram

r	red
g	green
b	blue
c	cyan
m	magenta
y	yellow

2D PLOTTING IN MATLAB

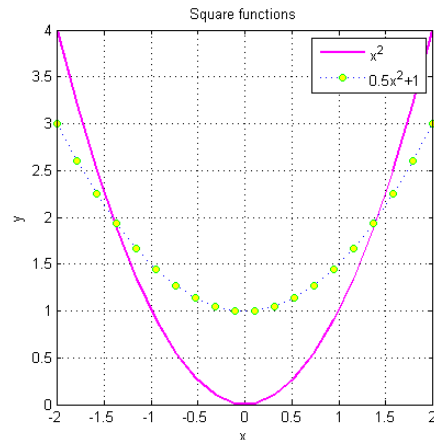
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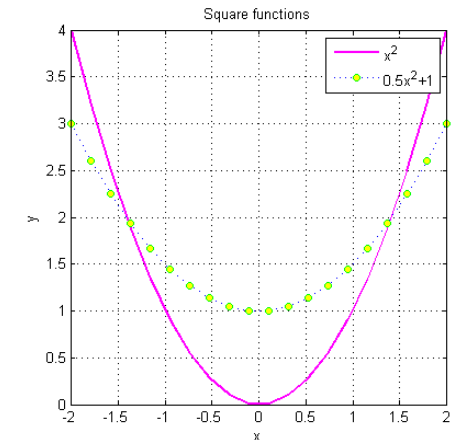
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```
x=linspace(-2,2,20);
y=x.^2;
plot(x,y,'-m',
'LineWidth',2)
hold on
y2=0.5.*x.^2+1;
plot(x,y2,':o','MarkerSize',
5,'MarkerEdgeColor','g',
'MarkerFaceColor','y')
grid on
axis('equal')
axis([-2,2,0,4])
xlabel('x')
ylabel('y')
title('Square functions')
legend('x^2','0.5x^2+1')
```



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grid on
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axis([-2,2,0,4])
xlabel('x')
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title('Square functions')
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FUNCTION `ezplot()`

<code>ezplot(fun)</code>	plots the expression $f=f(x)$ over the default domain $2\pi < x < 2\pi$
<code>ezplot(fun,[xmin,xmax])</code>	plots $f=f(x)$ over the specified domain
<code>ezplot(f,[xmin, xmax, ymin, ymax])</code>	plots $f=f(x)$ over the specified domain

EXAMPLES

```
ezplot('y=x+2')
ezplot('x^2+y^2=10')
h=ezplot('y=x+2',[0,5])
set(h,'Color','c','LineWidth',2,'Marker','o','LineStyle',':')
```

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