

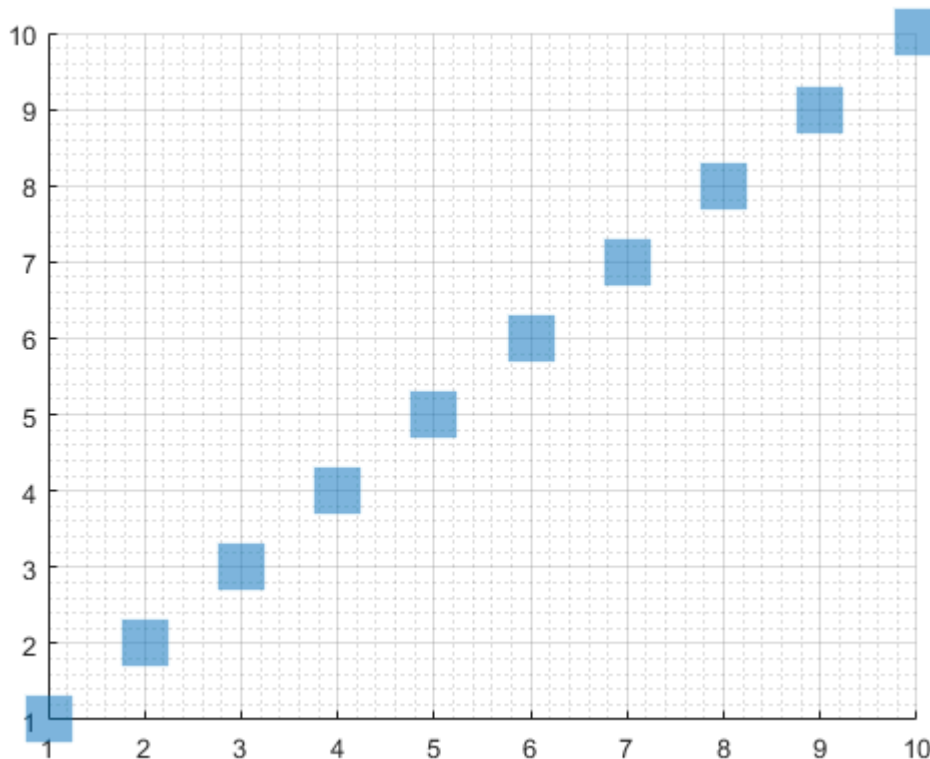
# Matlab Graph Scatter Plot Examples

back to [Fan's Intro Math for Econ](#), [Matlab Examples](#), or [Dynamic Asset Repositories](#)

## Scatter Plot Example

The plot below as square scatter points, each one with thick border. Can set transparency of border/edge and inside separately.

```
close all;  
figure();  
size = 100;  
s = scatter(1:10,1:10,size);  
  
s.Marker = 's';  
% color picked by using: uisetcolor  
s.MarkerEdgeColor = [0 0.4471 0.7412];  
s.MarkerEdgeAlpha = 0.5;  
s.MarkerFaceColor = [.61 .51 .74];  
s.MarkerFaceAlpha = 1.0;  
s.LineWidth = 10;  
grid on;  
grid minor;
```



```
% 'o' Circle  
% '+' Plus sign  
% '*' Asterisk
```

```

% '.' Point
% 'x' Cross
% 'square' or 's' Square
% 'diamond' or 'd' Diamond
% '^' Upward-pointing triangle
% 'v' Downward-pointing triangle
% '>' Right-pointing triangle
% '<' Left-pointing triangle
% 'pentagram' or 'p' Five-pointed star (pentagram)
% 'hexagram' or 'h' Six-pointed star (hexagram)
% 'none' No markers

```

## Scatter with Edge and Face Color and Transparency

Here is another way to Set Scatter Edge and Fac Colors and Transparencies.

```

% Generate Data
rng(123);
it_x_n = 10;
it_x_groups_n = 3;
mat_y = rand([it_x_n, it_x_groups_n]);
mat_y = mat_y + sqrt(1:it_x_groups_n);
mat_y = mat_y + log(1:it_x_n)';
ar_x = 1:1:it_x_n;

% Colors
blue = [57 106 177]./255;
red = [204 37 41]./255;
black = [83 81 84]./255;
green = [62 150 81]./255;
brown = [146 36 40]./255;
purple = [107 76 154]./255;
cl_colors = {blue, red, black, ...
             green, brown, purple};

% Scatter Shapes
cl_scatter_shapes = {'s','x','o','d','p','*'};
% Scatter Sizes
cl_scatter_sizes = {100,100,50,50,50,50};
% Legend Keys
cl_legend = {'For Borr', 'Inf Borr', 'For+Inf Br'};

% Plot
figure();
hold on;
for it_m = 1:it_x_groups_n
    scatter(ar_x, mat_y(:,it_m), cl_scatter_sizes{it_m}, ...
           'Marker', cl_scatter_shapes{it_m}, ...
           'MarkerEdgeColor', cl_colors{it_m}, 'MarkerFaceAlpha', 0.8, ...
           'MarkerFaceColor', cl_colors{it_m}, 'MarkerEdgeAlpha', 0.8);
    cl_legend{it_m} = cl_legend{it_m};
end
legend(cl_legend, 'Location', 'best');
grid on;

```

```
grid minor;
```

