```
% y \le sqrt(1 - x^2)
x = -1:0.01:1
x = 1 \times 201
  -1.0000 -0.9900 -0.9800 -0.9700 -0.9600 -0.9500 -0.9400 -0.9300 ...
plot(x, sqrt(1 - x.^2), x, -sqrt(1 - x.^2)); hold on;
x = -2:0.01:2
x = 1 \times 401
  -2.0000 -1.9900 -1.9800 -1.9700 -1.9600 -1.9500 -1.9400 -1.9300 ...
plot(x, sqrt(2) - x);
plot(x, zeros(size(x)));
scatter(0.5, 0.5, "x")
scatter(1, 0, "x")
scatter(-1, 0, "x")
scatter(1/sqrt(2), 1/sqrt(2), "x")
grid on
pbaspect([1 1 1])
hold off
xlim([-2.00 2.00])
ylim([-1.00 3.50])
```

