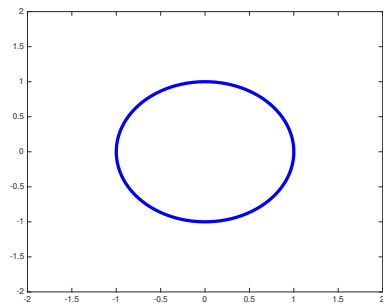


Plotting Circles and Ellipses

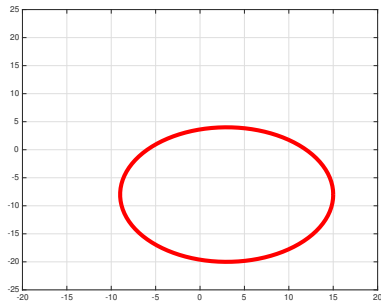
Unit Circle: $x^2 + y^2 = 1$

```
t = linspace(0, 2*pi);  
grid on  
plot( cos(t), sin(t), 'Color', 'blue', 'LineWidth', 4);  
axis([-2 2 -2 2])
```



Circle of radius 12 and center at (3,-8) $(x - 3)^2 + (y + 8)^2 = 12^2$

```
clf % clears screen of previous plots  
  
t = linspace(0, 2*pi, 100);  
plot( 3 + 12 * cos(t), -8 + 12 * sin(t), 'Color', 'red', 'LineWidth', 5)  
axis([-20 20 -25 25])  
grid on
```



Ellipse with center at Origin $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$

```
clf
t = linspace(0, 2*pi, 50);
a = 5;
b = 3;
plot( 5 * cos(t), 3 * sin(t), 'LineWidth', 4)
axis([-6 6 -6 6])
xline(0)
yline(0)
```

