

Code for Exercise 5

```
angle=unnamed(:,1);
y=unnamed(:,2);
Mo=8.8;
M=Mo*cosd(angle).^2;
M1=Mo*(cosd(angle));
plot(angle,y,'b')
hold on
plot(angle,M,"r")
plot(angle,M1,'m')
errorbar(angle,y,[2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
2.5 2.5 2.5 2.5 2.5 2.5], "horizontal")
errorbar(angle,y,[0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05
0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05], "vertical")
legend("Meter Reading
(mA)", "Mo*cos^2(Angle)", "Mo*cos(Angle)", "Horizontal Error
Bar", "Vertical Error Bar")
xlabel("Angle (Degrees)")
ylabel("Meter Reading (mA)")
```

Code for Exercise 6

```
angle=unnamed(1:5,3);
y=unnamed(1:5,4);
plot(angle,y,'b')
hold on
errorbar(angle,y,[2.5 2.5 2.5 2.5 2.5], "horizontal")
errorbar(angle,y,[0.05 0.05 0.05 0.05 0.05], "vertical")
xlabel("Angle (Degrees)")
ylabel("Meter Reading (mA)")
```