5 Servo Loop

5.2 Do some digging in a reference textbook and find ten equations that apply to:
a.) A machine's mechanical system.
b.) A machine's electrical system.

5.4 Refer to figure 5.2 and answer the following questions.

a.) What is the linear distance of the feedback resolution?

b.) What is the linear distance of one "friendly" pulse?

c.) What is the linear distance of one complete motor turn?

d.) What is the expected error pulse at 25% rapid?

5.5 Sketch the D/A signatures for the servo-loop actions below:

a.) Rapid move at 1000 ipm.
b.) Feed move at .02 in/rev with a 5000 rpm spindle
c.) Feed move at 200 ipm.
d.) A heavily loaded servo system.
e.) An overloaded servo system.