Transfer loss in 1 of LC

\[ \Delta x \text{ dB} = \frac{d}{dx} \text{ CxR} \]

new eq of currents

\[ V_0 - \frac{1}{2} C \text{ x} = 0 \]

Total loss of energy

Does \( V_0 \) and \( C \) leave V

with the ac and inductor?

\[ U = V + \text{cap} = C \text{V} \]

\[ U(t) = V_0 - \text{cap} \]

Air gap

\[ \text{gap} = V \]

\[ C \text{cap} = \frac{1}{2} C \text{V}^2 \]

\[ t < 0 \]

\[ U = V + \text{cap} = C \text{V} \]

Another view of force

Electrostatics

\[ \text{voltage} = \text{current + cap} \]

See me if this is a problem

Millen – W & F both work, d'oh!

\[ MW \]

\[ HW \]

\[ MW \]
\[ E = \frac{F}{L} \]

\[ F = C \text{ force to lift } F \]

\[ \text{Very common mistake: } F = OE \]

\[ E = \frac{\text{slack}}{C} \]

\[ \text{if } C \text{ is zero} \]

\[ \partial E \]

\[ \text{Flow: } F = g \]
\[ \frac{d^2x}{dt^2} = \frac{F}{m} = F - mg \]

Initial conditions:
\[ x(0) = x_0 \]
\[ \frac{dx}{dt}(0) = v_0 \]

Solving for \( x(t) \):
\[ x(t) = \frac{v_0}{g} t + x_0 \]

Equilibrium point:
\[ \frac{d}{dx}(F(x)) = 0 \]

Stable equilibrium point:
\[ F(x) < 0 \]

Unstable equilibrium point:
\[ F(x) > 0 \]
A: Much lower. What about when the roll is 5/15 docked?

What is the tension on this cord? Very high.

\[ \frac{7.6}{3} = \frac{20}{4} \]

Forces are in the direction:

\[ \frac{7.6}{3} = \frac{20}{4} \]

Vertical load on pole:

\[ \frac{7.6}{3} = \frac{20}{4} \]

Conc. position:

\[ + \]

Verlinbis load up:

\[ + \]

-20