9.
$$F = -kx$$
 $w_0 = \sqrt{k}$ $t = \frac{3}{4}$
 $F = -(27.0)(2.20)$
 $= -99.4$

$$\int \frac{(10)(1.1)(27.0)}{(99.4)} = 55$$

$$= 2.23 cm$$