ADVANCED DYNAMICS — PHY 4241/5227
SOLUTIONS – SET 11

(38)

$$\triangle t = \frac{\tau}{\sqrt{1-(0.995)^2}} = \frac{1051 \times 10^{-15}\, s}{0.099875} = 1.0523 \times 10^{-11}\, s$$

$$\triangle x = \triangle t \times 0.995\, c = 0.00314\, m \quad (c \text{ speed of light}) .$$