

58. Using Eq. 38-10,

$$v = \frac{d}{t} = \frac{6.0 \text{ ly}}{2.0 \text{ y} + 6.0 \text{ y}} = \frac{(6.0c)(1.0 \text{ y})}{2.0 \text{ y} + 6.0 \text{ y}} = 0.75c.$$