

$$\begin{aligned} \text{(a)} \quad d \approx L_5 &= (30 \text{ ft/s})(12 \text{ s}) + 27 \cdot 12 + 25 \cdot 12 + 22 \cdot 12 + 24 \cdot 12 \\ &= (30 + 27 + 25 + 22 + 24) \cdot 12 = 128 \cdot 12 = 1536 \text{ ft} \end{aligned}$$

$$\text{(b)} \quad d \approx R_5 = (27 + 25 + 22 + 24 + 28) \cdot 12 = 126 \cdot 12 = 1512 \text{ ft}$$

(c) The estimates are neither lower nor upper estimates since v is neither an increasing nor a decreasing function of t .