

2/16

$$\int v dv = \int a ds ; \int_{200/3.6}^{30/3.6} v dv = a \int_0^{600} ds$$

$$200 \text{ km/h}$$

$$= 200/3.6 \text{ m/s}$$

$$30 \text{ km/h}$$

$$= 30/3.6 \text{ m/s}$$

$$\frac{1}{2(3.6)^2} (30^2 - 200^2) = 600 a$$

$$\underline{a = -2.51 \text{ m/s}^2}$$