

$$a(2-1) = \frac{\text{slope 2} - \text{slope 1}}{t_2 - t_1} = \text{same if uniform acceleration}$$

$$a(3-2) = \frac{\text{slope 3} - \text{slope 2}}{t_3 - t_2}$$

$$a(2-1) = \frac{0.119 \text{ m.s}^{-1} - 0.1325 \text{ m.s}^{-1}}{1.65 - 0.75} = -0.0135 \text{ m.s}^{-1} = 3.55 \times 10^{-2} \text{ m.s}^{-2}$$

$$a(3-2) = \frac{0.3194 \text{ m.s}^{-1} - 0.119 \text{ m.s}^{-1}}{0.425 - 0.225} = 0.2004 \text{ m.s}^{-1} = 1.7 \times 10^{-2} \text{ m.s}^{-2}$$

$$\frac{\Delta d}{\Delta t} = \frac{0.115 \text{ m}}{0.36 \text{ s}} = 0.3194 \text{ m.s}^{-1}$$

$$\frac{\Delta d}{\Delta t} = \frac{0.05 \text{ cm}}{0.425} = 0.1179 \text{ m.s}^{-1}$$

$$= 0.1179 \text{ m.s}^{-1}$$

tangent slope (0.7, 5.75)

$$\frac{\Delta d}{\Delta t} = \frac{10.6 \text{ cm}}{0.6 \text{ sec}} = 0.1325 \text{ m.s}^{-1}$$

