

$$s + 3t = l$$

$$t = \frac{s}{3}$$

$$d = t$$

$$V_i = 0$$

$$a = g$$

$$V_f = ?$$

$$V_f^2 = \cancel{V_i^2} + 2ad$$

$$V_f = \sqrt{2ad}$$

$$= \sqrt{2a \frac{s}{3}}$$

$$V_s = 3V_t = 3V_f$$

$$= 3\sqrt{2a \frac{s}{3}}$$

$$= \sqrt{6as}$$

