

Tugas gerak lurus

Nama : Mario Valentino Hasan

Kelas : X IPA 6

Nama: Mario Valentino Hasan

Kelas: X IPA 6

$$1 \quad A. v = \frac{270}{4.5} = 60 \text{ km/jam}$$

$$B. s = 60 \cdot 7 = 420 \text{ km}$$

$$C. t = \frac{300}{60} = 5 \text{ jam}$$

$$2 \quad A \quad S_a = S_b$$

$$v_a \times t_a = v_b \times t_b$$

$$20 \times t_a = 30 \times (t_a - 10)$$

$$20 t_a = 30 t_a - 300$$

$$-10 t_a = -300$$

$$t_a = 30 \text{ sec}$$

$$t_b = t_a - 10 = 20 \text{ sec}$$

$$B \quad (20 + 30) \times 10 =$$

$$50 \times 10 =$$

$$500 \text{ M}$$

$$3 \quad A) \quad L = \frac{1}{2} \times (5 + 15) \times 20$$

$$L = \frac{20 \times 20}{2} = \frac{400}{2} = 200 \text{ M}$$

$$B) \quad s_1 + s_2 + s_3 =$$

$$5 + 15 + 25 = 45$$

4 $h = 0,9 \cdot 10 \cdot 3^2$
 $= 45 \text{ M}$

5 A) $t = \frac{15}{10} = 1,5 \text{ s}$

b) $h = 15 \cdot 1,5 - \frac{1}{2} \cdot 10 \cdot 1,5^2$
 $h = 22,5 - 11,25$
 $h = 11,25 \text{ m}$

c) $h = 15 \cdot 2 - \frac{1}{2} \cdot 10 \cdot 0,5^2$
 $h = 30 - 1,25$
 $h = 28,75$

$V = \sqrt{28,75 \cdot 20}$
 $V = \sqrt{28,75 \cdot 10 \cdot 10}$
 $V = \sqrt{2875}$

$V = 53,619 \text{ m/s}$

6 A) $Vt = 10 \times 0,5 + 5 = 10 \text{ m/s}$

B) $10^2 - 5^2 = 100 - 25 = 75 \text{ M}$