

Tugas Fisika

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Kelas: X MIPA 4

1. Diketahui:  $h = 30$  (6x5) m

$$g = 10 \text{ m/s}^2$$

$$v = \dots ?$$

$$t = \dots ?$$

Jawab:  $v = \sqrt{2 \times g \times h}$

$$v = \sqrt{2 \times 10 \times 30}$$

$$v = \sqrt{600}$$

$$v = 10\sqrt{6} \text{ m/s}$$

$$h = \frac{1}{2}gt^2$$

$$30 = \frac{1}{2}10t^2$$

$$30 = 5t^2$$

$$t^2 = \frac{30}{5}$$

$$t^2 = 6$$

$$t = \sqrt{6}$$

$$t = 2,49 / 2,5 \text{ sekon}$$

2. Diketahui:  $v_0 = 10 \text{ m/s}$

$$t = 1,2 \text{ s}$$

$$g = 10 \text{ m/s}^2$$

Jawab:  $h = v_0 \cdot t + \frac{1}{2}gt^2$

$$= 10 \cdot 1,2 + \frac{1}{2} \cdot 10 \cdot 1,2^2$$

$$= 12 + 7,2$$

$$= 19,2 \text{ m}$$