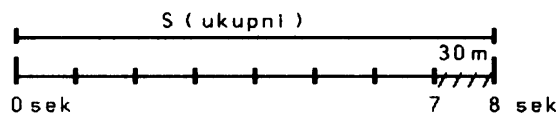


1.45.

JEDNOLIKO UBRZANO GIBANJE



$$t = 1 \text{ sek} (8 \text{ sek} - 7 \text{ sek})$$

$$\text{put u 8 sek} = 30 \text{ m}$$

a) $a = ?$

b) $v = ?$ na kraju 8 sek

c) $S_1 = ?$ na kraju 1 sek

a) UKUPAN PUT = PUT OD 0-7 sek + PUT OD 7-8 sek.

POŠTO TREBAMO IZRAČUNATI AKCELERACIJU PUT MOŽEMO IZRAZITI FORMULOM $S = \frac{a}{2} t^2$

IZ CRTEŽA VIDIMO DA UKUPAN PUT TRAJE 8 SEK, A PUT 0-7 sek

7 SEKUND, TO UVRSTIMO U OVU FORMULU

$$S_{uk} = S_{0-7} + S_{7-8}$$

$$\frac{a}{2} 8^2 = \frac{a}{2} 7^2 + 30$$

$$\frac{a}{2} 64 = \frac{a}{2} 49 + 30$$

$$\frac{a}{2} 64 = \frac{a}{2} 49 + 30$$

$$\frac{a}{2} 64 - \frac{a}{2} 49 = 30$$

$$15 \frac{a}{2} = 30 / \cdot 2$$

$$15 a = 60 / : 15$$

$$a = 4 \text{ m/s}^2$$

b) IZRAČUNAVANJE BRZINE NA KRAJU 8 sek.

$$t = 8 \text{ sek}$$

$$a = \frac{v}{t} / \cdot t$$

$$a = 4 \frac{\text{m}}{\text{s}^2}$$

$$v = ?$$

$$a \cdot t = v$$

$$v = a \cdot t = 4 \cdot 8 = 32 \text{ m/s}$$

c) IZRAČUNAVANJE PUTA U 1 SEK

$$t = 1 \text{ sek}$$

$$a = 4 \frac{\text{m}}{\text{s}^2}$$

$$S_1 = ?$$

$$S = \frac{a}{2} t^2 = \frac{4}{2} \cdot 1^2 = 2 \cdot 1 = 2 \text{ m}$$