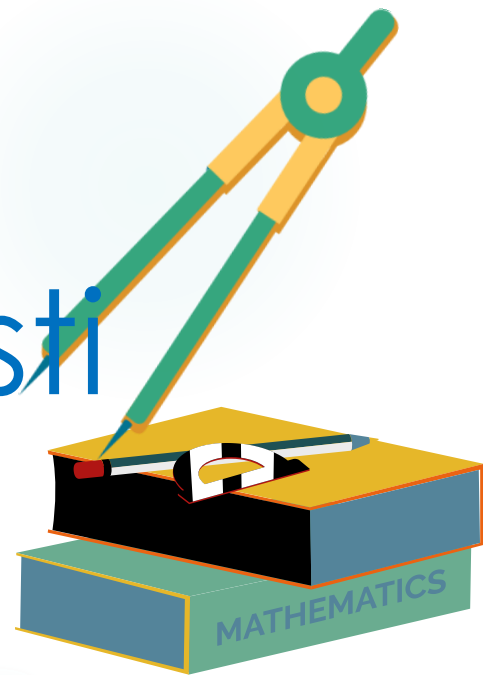
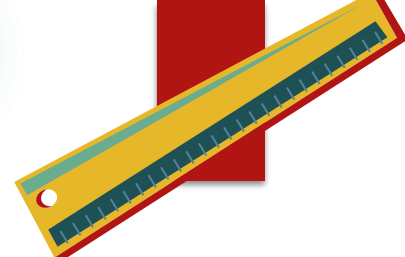
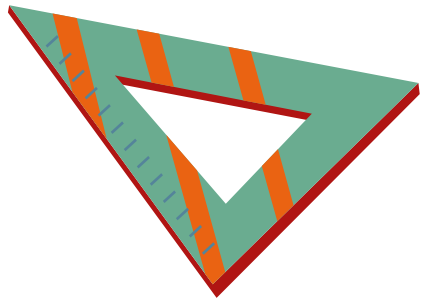


Ogledalce,
mjerenje i
primjena sličnosti





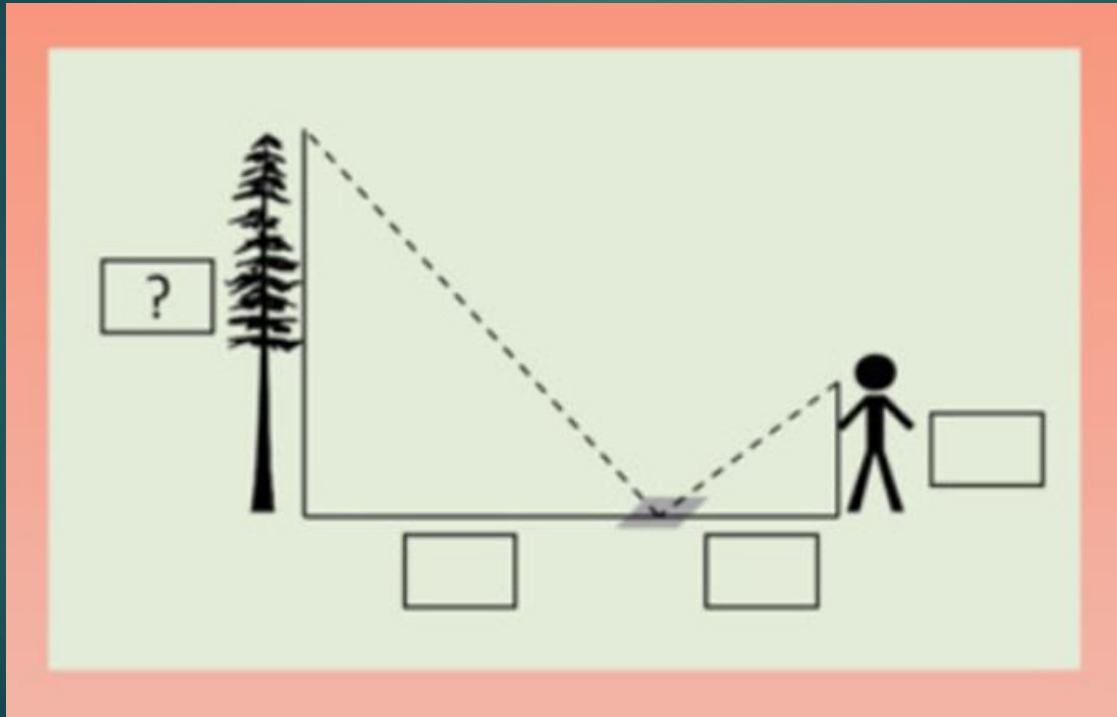
Projektni zadatak

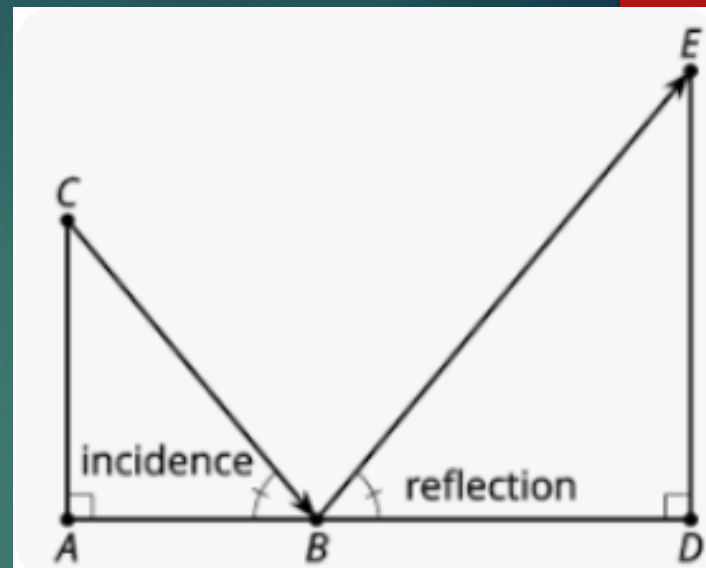
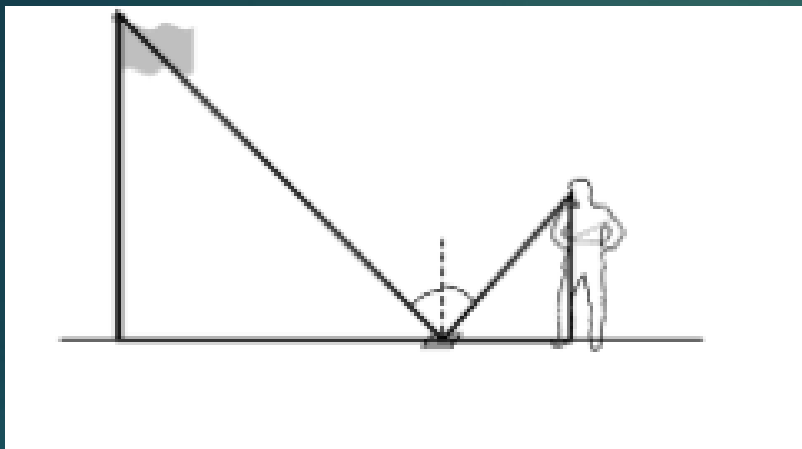


Određivanje visine objekta
pomoću zrcala



Kako pomoću zrcala možemo izmjeriti visinu objekta?





Objasnite koji zakon fizike primjenjujete.

KORACI

01

Izmjeriti
visinu očiju
učenika (h)



02



Postaviti zrcalo na tlo
između odabranog
objekta i učenika

03

Učenik se polako udaljava
od zrcala sve dok u njemu
ne opazi vrh objekta

04

Učenik u paru mjeri udaljenost
od zrcala do objekta (a) te
udaljenost od zrcala do učenika
(b)



05

Visinu objekta (H)
izračunavamo koristeći
sličnost trokuta





ZADATAK:
ODREDITI VISINU STUPA.



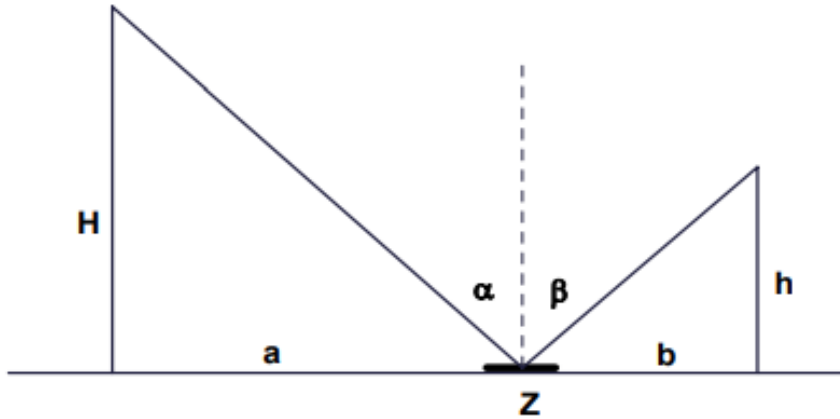
$h = 173 \text{ cm}$



$b = 40 \text{ cm}$



$a = 392 \text{ cm}$



$$a = 392 \text{ cm}$$

$$b = 40 \text{ cm}$$

$$h = 173 \text{ cm}$$

$$H = ?$$

$$H : a = h : b$$

$$\frac{H}{a} = \frac{h}{b}$$

$$H = a \cdot \frac{h}{b}$$

$$H = 392 \text{ cm} \cdot \frac{173 \text{ cm}}{40 \text{ cm}}$$

$$H = 1695.4 \text{ cm} = 16.954 \text{ m} \approx 17 \text{ m}$$