

Analogije među likovima i tijelima i među njihovim formulama

**Ovo je materijal za pano.
Preporučam isprintati na papir nježno žute boje.**

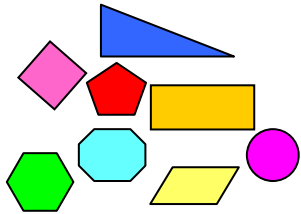
**Dolje ćete naći dvije varijante.
Prva se sastoji od dva papira
koje bi trebalo dolijepiti jedan na drugi
da se dobije jedna tablica bez prekida.**

**U drugoj verziji su slike grupirane
i u njoj su tri papira
koji trebaju ostati odvojeni
(ne lijepe se jedan na drugi).
Izaberite koja vam varijanta više odgovara.**

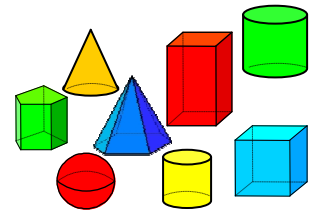
Antonija Horvatek

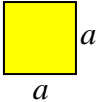
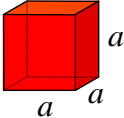
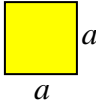
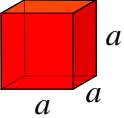
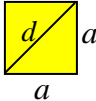
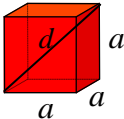
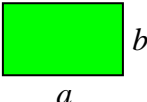
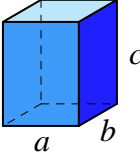
Matematika na dlanu

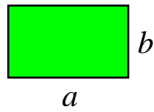
<http://www.antonija-horvatek.from.hr/>



Analogije među likovima i tijelima i među njihovim formulama



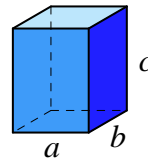
GEOMETRIJSKI LIKOVI - dvodimenzionalni - dijelovi ravnine	GEOMETRIJSKA TIJELA - trodimenzionalna - dijelovi prostora
površina (p) - veličina unutrašnjosti lika	obujam (V) - veličina unutrašnjosti tijela
 kvadrat	 kocka
 $p = \text{duljina} \cdot \text{širina}$ $p = a^2$ broj dimenzija kvadrata	 $V = \text{duljina} \cdot \text{širina} \cdot \text{visina}$ $V = a^3$ broj dimenzija kocke
 $d = a\sqrt{2}$	 $d = a\sqrt{3}$
 pravokutnik	 kvadar



$p = \text{duljina} \cdot \text{širina}$

$$p = a \cdot b$$

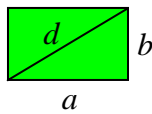
↑↑
dimenzije pravokutnika



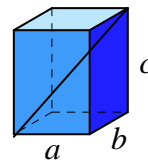
$V = \text{duljina} \cdot \text{širina} \cdot \text{visina}$

$$V = a \cdot b \cdot c$$

↑↑↑
dimenzije kvadra

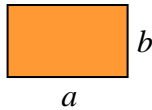


$$d = \sqrt{a^2 + b^2}$$



$$d = \sqrt{a^2 + b^2 + c^2}$$

pravokutnik

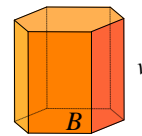


$$p = a \cdot b$$

$P = \text{baza} \cdot \text{visina}$

↑↑
dvije dimenzije

prizma



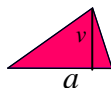
$$V = B \cdot v$$

$V = \text{baza} \cdot \text{visina}$

↑↑ ↓
površina baze; jedna dimenzija
dvije dimenzije

↑↑
tri dimenzije

trokut

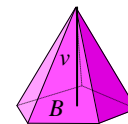


$$P = \frac{a \cdot v}{2}$$

$$P = \frac{\text{baza} \cdot \text{visina}}{2}$$

(Uočite dimenzije u formuli!)

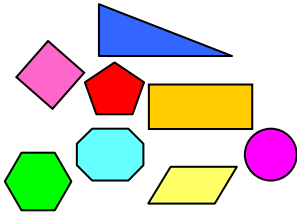
piramida



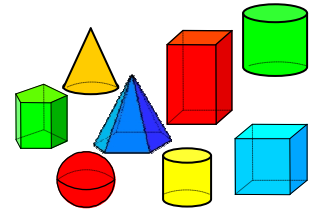
$$V = \frac{B \cdot v}{3}$$

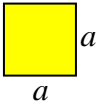
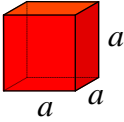
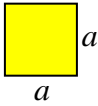
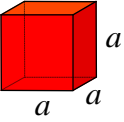
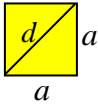
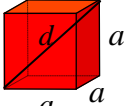
$$V = \frac{\text{baza} \cdot \text{visina}}{3}$$

(Uočite dimenzije u formuli!)

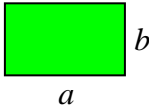
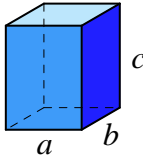
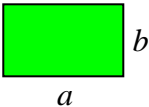
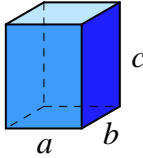
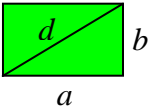
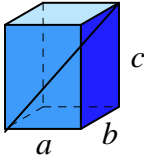


Analogije među likovima i tijelima i među njihovim formulama

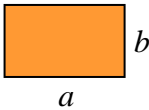
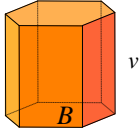
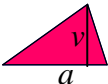
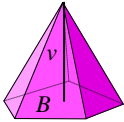


GEOMETRIJSKI LIKOVI - dvodimenzionalni - dijelovi ravnine	GEOMETRIJSKA TIJELA - trodimenzionalna - dijelovi prostora
površina (p) - veličina unutrašnjosti lika	obujam (V) - veličina unutrašnjosti tijela
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Analogije među likovima i tijelima i među njihovim formulama

LIKOVIMA - dvodimenzionalni - dijelovi ravnine	TIJELIMA - trodimenzionalna - dijelovi prostora
 <p>pravokutnik</p>	 <p>kvadar</p>
 <p>$p = \text{duljina} \cdot \text{širina}$</p> $p = a \cdot b$ <p style="text-align: center;">↑↑ dimenzije pravokutnika</p>	 <p>$V = \text{duljina} \cdot \text{širina} \cdot \text{visina}$</p> $V = a \cdot b \cdot c$ <p style="text-align: center;">↑↑↑ dimenzije kvadra</p>
 $d = \sqrt{a^2 + b^2}$	 $d = \sqrt{a^2 + b^2 + c^2}$

Analogije među likovima i tijelima i među njihovim formulama

LIKOVİ - dvodimenzionalni - dijelovi ravnine	TIJELA - trodimenzionalna - dijelovi prostora
<p>pravokutnik</p>  $p = a \cdot b$ <p>$p = \text{baza} \cdot \text{visina}$ $\swarrow \quad \nearrow$ dvije dimenzije</p>	<p>prizma</p>  $V = B \cdot v$ <p>$V = \text{baza} \cdot \text{visina}$ $\swarrow \quad \nwarrow$ površina baze; jedna dimenzija dvije dimenzije $\swarrow \quad \nwarrow$ tri dimenzije</p>
<p>trokut</p>  $p = \frac{a \cdot v}{2}$ $p = \frac{\text{baza} \cdot \text{visina}}{2}$ <p>(Uoči dimenzije u formuli!)</p>	<p>piramida</p>  $V = \frac{B \cdot v}{3}$ $V = \frac{\text{baza} \cdot \text{visina}}{3}$ <p>(Uoči dimenzije u formuli!)</p>