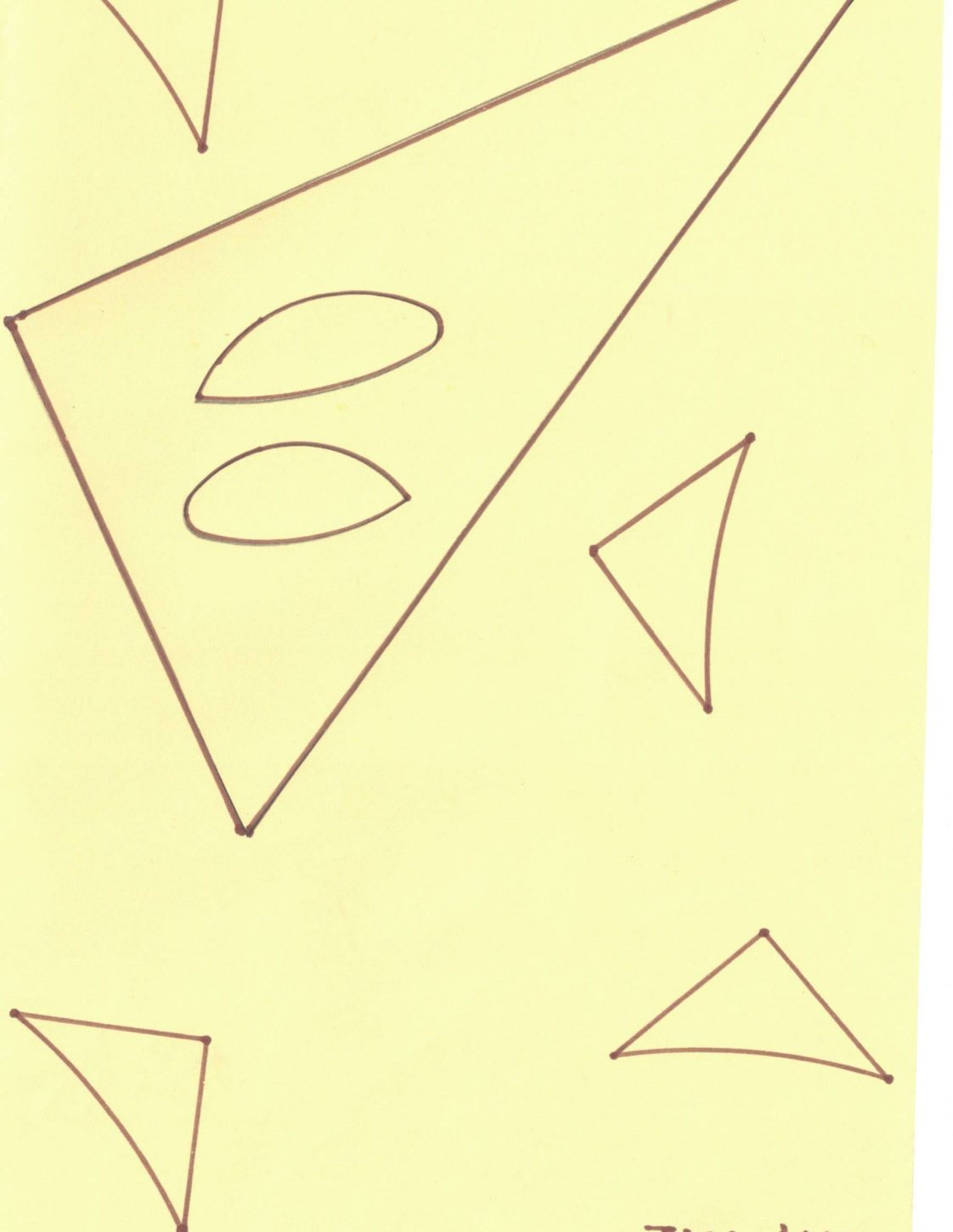
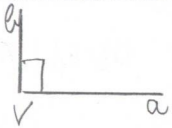

TIM KOJEK

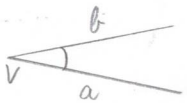
KUT JE DIO RAVNINE OMEĐEN

S DVA PRAVCA KOJI IMAJU ISTU POČETNU TOČKU

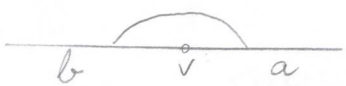
PRAVI KUT - KRACI SU OKOMITI 90°

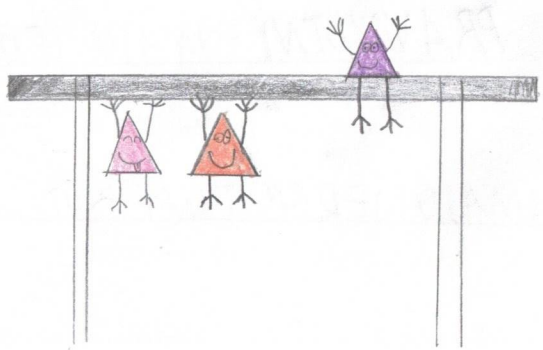


ŠILJASTI KUT - KUT ČIJA JE MJERA MANJA OD PRAVOG KUTA



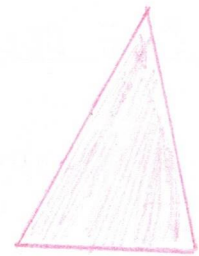
ISPRUŽENI KUT KRACI ČINE JEDAN PRAVAC, MJERA JE 180°

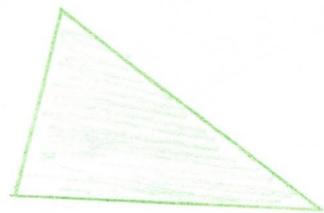




TROKUT

JE DIO RAVNINE OMEĐEN S TRI DUŽINE, UKLJUČUJUĆI SVE TOČKE TIH DUŽINA

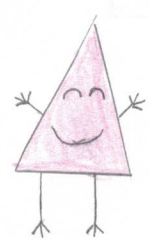




OMEĐEN S TRI DUŽINE IMA TRI VRHA, TRI STRANICE I TRI KUTA

OPSEG TROKUTA JEDNAK JE ZBROJU NJEGOVIH STRANICA

$O = a + b + c$



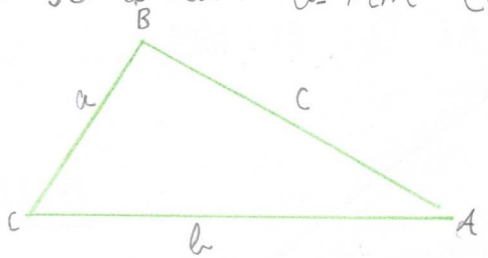
VRSTE TROKUTA

RAZNOSTRANČAN - SVE STRANICE

RAZLIČITE DULJINE

ZAD.1

IZRAČUNAJ OPSEG AKO JE a=4cm b=7cm c=5cm



O=a+b+c

a=4cm

b=7cm

c=5cm

O=?

O=a+b+c

O=4+7+5

O=16cm

JEDNAKOSTRANIČAN TROKUT STRANICE

JEDNAKIH DULJINA

ZAD.2

IZRAČUNAJ OPSEG AKO JE a=4cm

O=a+a+a ILI a·3

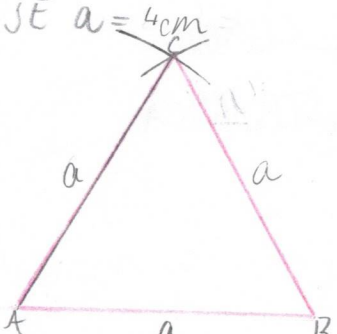
a=6cm

O=?

O=2·3

O=4·3

O=12cm



JEDNAKOKRAČAN - DVIJE STRANICE

JEDNAKE DULJINE ZOVU SE KRAKOVI, A TREĆA STRANICA JE OSNOVICA

ZAD.3

KOLIKI JE OPSEG TROKUTA AKO JE DULJINA KRAKA 15cm, A DULJINA OSNOVICE 10cm

O=a+2·b

a=10cm = 1dm

b=15cm = 1,5dm

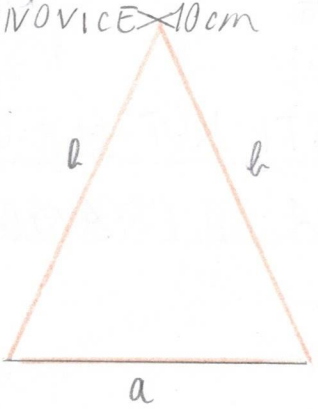
O=?

O=a+2b

O=1dm+2·1,5dm

O=1dm+3dm

O=4dm

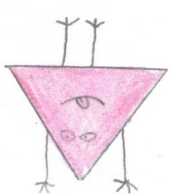


S OBZIROM NA MJERE KUTOVA

ŠILJASTOKUTNI - SVI KUTOVI SU ŠILJASTI

PRAVOKUTNI - IMAJU JEDAN PRAVI KUT

TUPOKUTNI - IMAJU JEDAN TUPI KUT

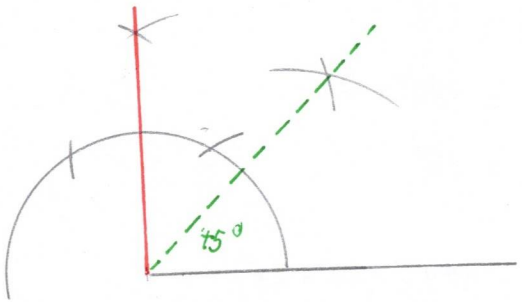


OSNOVICU JEDNAKOKRAČNOG TROKUTA

$\beta = 180° - 76°$

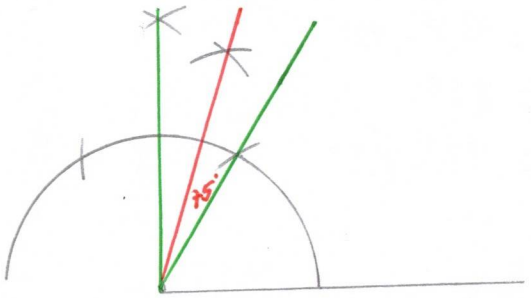
$\beta = 106° : 2$

$\beta = 53°$



45°

90° : 2

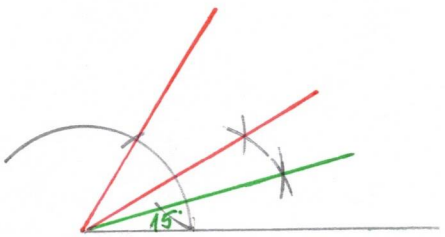


75°

① 90°

② 60°

③ 75°



15°

① 60°

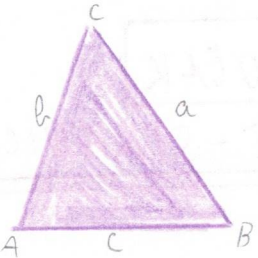
② 30°

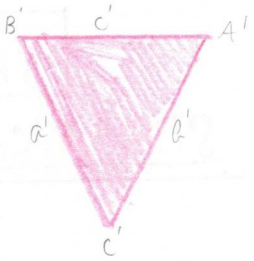
③ 15°

STRANICA - STRANICA - STRANICA

AKO DVA TROKUTA IMAJU JEDNAKE SVE TRI DULJINE ODGOVARAJUĆIH STRANICA, ONI SU SUKLADNI.

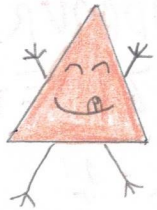
$a = a'$ $b = b'$ $c = c'$ $\triangle ABC \cong \triangle A'B'C'$





KSK - POUČAK

KUT - STRANICA - KUT

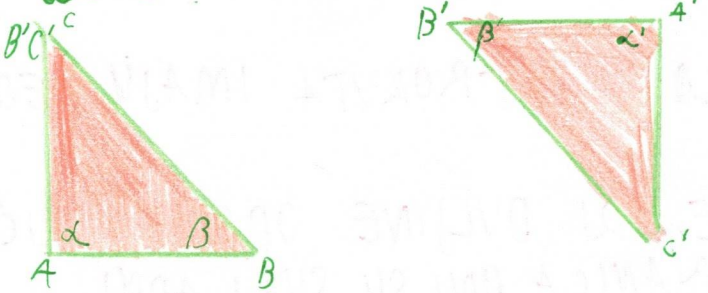


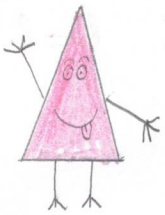
AKO SE TROKUTI PODUDARAJU U JEDNO

ODGOVARAJUĆOJ STRANICI I KUTOVIMA UZ TU STRANICU, TADA SU SUKLADNI.

$c = c'$ $\beta = \beta'$ $\alpha = \alpha'$

$\triangle ABC \cong \triangle A'B'C'$





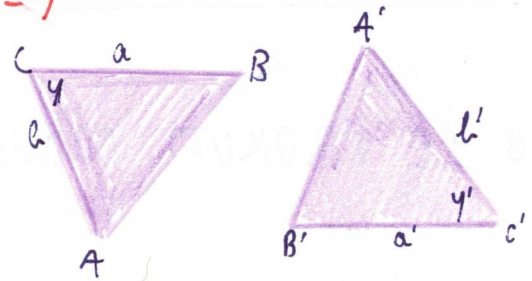
SKS - POUČAK

STRANICA - KUT - STRANICA

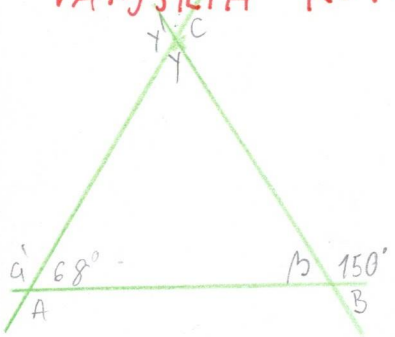
AKO SE TROKUTI PODUDARAJU U DVJEMA ODGOVARAJUĆIM STRANICAMA I KUTU IZMEĐU NJIH, TADA SU SUKLADNI

$b = b'$ $a = a'$ $\gamma = \gamma'$

$\triangle ABC \cong \triangle A'B'C'$



ODREDI VELIČINE UNUTARNJIH I VANJSKIH KUTOVA TROKUTA



$\alpha = 180° - 68°$

$\alpha' = 112°$

$\beta = 180° - 150°$

$\beta = 30°$

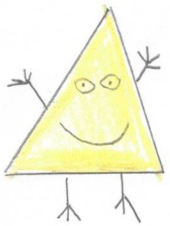
$\gamma = 180° - (30° + 68°)$

$\gamma = 180° - 98°$

$\gamma = 82°$

$\gamma = 180° - 82°$

$\gamma' = 98°$



$\alpha = 180° - 146°$

$\alpha = 34°$

$\beta = 180° - 136°$

$\beta = 44°$

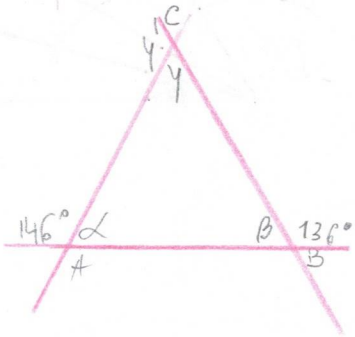
$\gamma = 180° - (34 + 44)$

$\gamma = 180° - 78°$

$\gamma = 104°$

$\gamma' = 180° - 104°$

$\gamma' = 78°$



razlomaka jednakih nazivnika

$\frac{a}{n} + \frac{b}{n} = \frac{a+b}{n}, n \neq 0$

$\frac{7}{8} + \frac{4}{8} = \frac{11}{8}$

$\frac{a}{n} - \frac{b}{n} = \frac{a-b}{n}, n \neq 0, a \geq b$

$\frac{8}{9} - \frac{2}{9} = \frac{6}{9}$

Razlomke s različitim nazivnicima zbrajamo oduzimamo tako da:

1. Razlomke svedemo na najmanji zajednički nazivnik
2. Nazivnik prepišemo
3. Brojnike zbrajamo/oduzmemo

skrativ

$\frac{2}{9} + \frac{1}{3} =$

$\frac{2}{9} + \frac{3}{9}$

$\frac{5}{9}$

$\frac{4}{10} + \frac{5}{2} =$

$= \frac{4}{10} + \frac{25}{10} =$

$= \frac{29}{10} = 2\frac{9}{10}$

$\frac{4}{3} - \frac{2}{5} =$

$= \frac{20}{15} - \frac{6}{15}$

$= \frac{14}{15}$

$\frac{5}{6} - \frac{1}{3}$

$= \frac{5}{6} - \frac{2}{6}$

$= \frac{3}{6_2} = \frac{1}{2}$

U brojevnom izrazu sa zagradama najprije izračunavamo izraz u zagradi

$\frac{3}{4} : \left(\frac{1}{2} + \frac{1}{4}\right) =$

$= \frac{3}{4} : \left(\frac{2}{4} + \frac{1}{4}\right)$

$= \frac{3}{4} : \frac{3}{4}$

$= \frac{3}{4_1} \cdot \frac{4_1}{3_1} =$

$= \frac{1}{1} = 1$

$\left(\frac{1}{5} - \frac{1}{10}\right) : \frac{3}{10} =$

$= \left(\frac{2}{10} - \frac{1}{10}\right) : \frac{3}{10} =$

$= \frac{1}{10} : \frac{3}{10}$

$= \frac{1}{10_1} \cdot \frac{10_1}{3}$

$= \frac{1}{1} \cdot \frac{1}{3} = \frac{1}{3}$

Množenje razlomaka tako da pomnožimo brojnik s brojnikom i nazivnik s nazivnikom

$\frac{a}{b} \cdot \frac{c}{d} = \frac{a \cdot c}{b \cdot d}, \quad b \neq 0 \text{ i } d \neq 0$

$\frac{3}{5} \cdot \frac{1}{6} =$

$= \frac{3 \cdot 1}{5 \cdot 6} = \frac{3_1}{30_{10}} = \frac{1}{10}$

$\frac{9_3}{7_1} \cdot \frac{1_1}{6_2} =$

$= \frac{3}{1} \cdot \frac{7}{2} =$

$= \frac{21}{2}$

$\frac{2_1}{5} \cdot \frac{4}{6_3} =$

$= \frac{1}{5} \cdot \frac{4}{6}$

$= \frac{4}{30_{15}} = \frac{2}{15}$

OPREZ

$\frac{3}{4} + \frac{2}{5}$ NE

$\frac{3}{4} \frac{2}{5}$ DA