

## NALOGE ZA 3. LETNIK - PLANIMETRIJA 2

Naloge<sup>1</sup> so namenjene utrjevanju učne snovi in pripravi na preverjanje in ocenjevanje znanja

### ROMB

1. Izračunaj ploščino romba s podatki:

- (a)  $e = 12cm, f = 16cm$  [R:  $S = 96cm^2$ ]  
(b)  $o = 68m, e = 16m$  [R:  $S = 240m^2$ ]  
(c)  $a = 10cm, \alpha = 150^0$  [R:  $S = 50cm^2$ ]  
(d)  $o = 39cm, e : f = 12 : 5$  [R:  $S = 67,5cm^2$ ]  
(e)  $v = 12cm, \alpha = 60^0$  [R:  $S = 96\sqrt{3}cm^2$ ]

### PARALELOGRAM

2. Izračunaj ploščino paralelograma s podatki:

- (a)  $a = 8,2cm, v_a = 6,5cm$  [R:  $S = 53,3cm^2$ ]  
(b)  $b = 14\frac{3}{7}m, v_b = 4\frac{3}{8}m$  [R:  $S = 63\frac{1}{8}m^2$ ]  
(c)  $a = 12,5m, b = 10,2m, \alpha = 50^0$  [R:  $S = 97,67m^2$ ]  
(d)  $a = 12,5m, b = 10,2m, \alpha = 130^0$  [R:  $S = 97,67m^2$ ]  
(e)  $e = 70cm, f = 4dm, \varphi = 60^0$  [R:  $S = 7\sqrt{3}dm^2$ ]

3. V paralelogramu z danimi podatki izračunaj zahtevano:

- (a)  $a = 42dm, v_a = 22,3dm, b = 66,9dm$ ; Izračunaj:  $v_b$ . [R:  $v_b = 14dm$ ]  
(b)  $o = 186m, a = 34m, \alpha = 37^037'$ ; Izračunaj:  $v_b$  in  $S$ . [R:  $v_b = 20,75m, S = 1224,41m^2$ ]  
(c)  $S = 41cm^2, a = 5cm, b = 1dm$ ; Izračunaj:  $v_b$  in  $\alpha$ . [R:  $v_b = 4,1dm, \alpha = 55^05'$ ]  
(d)  $S = 144cm^2, v_a = 12cm, v_b = 8cm$ ; Izračunaj:  $o$ . [R:  $o = 60cm$ ]  
(e)  $S = 512m^2, a = 21,5m, \alpha = 54^0$ ; Izračunaj:  $o$  in  $v_a$ . [R:  $o = 101,88m, v_a = 23,82m$ ]

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<sup>1</sup>Pripravila Vera Orešnik, prof.

## TRAPEZ

4. Izračunaj ploščino trapeza:

- (a)  $a = 12cm, c = 8cm, v = 2,5cm$  [R:  $S = 25cm^2$ ]  
(b)  $a = 6,5dm, b = 4dm, c = 3,5dm, \beta = 60^0$  [R:  $S = 10\sqrt{3}dm^2$ ]  
(c)  $a = 36m, c = 12m, d = 7m, \delta = 155^0$  [R:  $S = 71m^2$ ]  
(d)  $a = 8cm, c = 6cm, \alpha = 45^0, \beta = 30^0$  [R:  $S = 5,12cm^2$ ]  
(e)  $e = 6\sqrt{3}cm, f = 3\sqrt{2}cm, \varphi = 60^0$  [R:  $S = \frac{27}{2}\sqrt{2}$ ]  
(f)  $a = 44cm, b = 17cm, c = 16cm, d = 25cm$  [R:  $S = 450cm^2$ ]

5. V trapezu izračunaj zahtevano:

- (a)  $S = 100cm^2, a = 1dm, c = 5cm; v = ?$  [R:  $v = \frac{40}{3}$ ]  
(b)  $S = 36m^2, a : c = 5 : 4, v = 8m; a, c = ?$  [R:  $a = 5m, c = 4m$ ]  
(c)  $S = 200cm^2, v = 1dm, a = 26cm; c = ?$  [R:  $c = 14cm$ ]  
(d)  $S = 21m^2, a = 10m, c = 4m, \gamma = 150^0; b, d = ?$  [R:  $b = 6m, d = 3,11m$ ]

## ENAKOKRAKI TRAPEZ

6. Izračunaj ploščino enakokrakega trapeza:

- (a)  $a = 21m, b = d = 15m, c = 3m$  [R:  $S = 144m^2$ ]  
(b)  $a = 7\frac{1}{3}mm, b = d = 8\frac{1}{3}mm, c = 2\frac{2}{3}mm$  [R:  $S = 40mm^2$ ]  
(c)  $a = 5cm, c = 4cm, \alpha = 60^0$  [R:  $S = \frac{9}{4}\sqrt{3}cm^2$ ]  
(d)  $a = 6,8dm, b = d = 2,6dm, \alpha = 45^0$  [R:  $S = 9,12dm^2$ ]  
(e)  $c = 50m, v = 2,4m, \alpha = 20^036'$  [R:  $S = 135,32m^2$ ]  
(f)  $e = f = 7cm, \varphi = 42,55^0$  [R:  $S = 16,57cm^2$ ]  
(g)  $e = f = 17,7cm$ , diagonali sta si pravokotni [R:  $S = 156,65cm^2$ ]

7. Za enakokraki trapez izračunaj zahtevano:

- (a)  $S = 228cm^2, a = 24cm, c = 14cm; b = ?$  [R:  $b = 13cm$ ]  
(b)  $S = 56m^2, a : b : c = 10 : 5 : 4; v = ?$  [R:  $v = 4\sqrt{2}m$ ]  
(c)  $b = 24cm, e = 40cm, v = 8cm; S, a, b = ?$  [R:  $S = 128\sqrt{6}cm^2, a = 16(\sqrt{6} + \sqrt{2})cm,$   
 $c = 16(\sqrt{6} - \sqrt{2})cm$ ]

## DELTOID

8. Izračunaj ploščino deltoida z diagonalama  $e$  in  $f$ . ( $f$  razpolavlja deltoid).

- (a)  $e = 6\frac{1}{3}cm, f = 8\frac{2}{3}cm$  [R:  $S = 27\frac{4}{9}cm^2$ ]  
(b)  $a = 2,8m, b = 7,3m$ , kot med  $a$  in  $b$   $132^0$  [R:  $S = 15,19m^2$ ]  
(c)  $a = 13,5dm, f = 24,7dm$ , kot med  $a$  in  $f$   $22,5^0$  [R:  $S = 127,61dm^2$ ]