

Rješenja:

4. (a) $m=11$

$$d_n = ?$$

$$d_n = n - 3$$

$$d_{11} = 11 - 3$$

$$\boxed{d_{11} = 8}$$

(b) $d_6 = 3$

(c) $d_7 = 4$

5. (a) $d_n = 18$

$$n = ?$$

$$d_n = n - 3$$

$$18 = n - 3$$

$$n = 18 + 3$$

$$\boxed{n = 21}$$

(b) $n = 28$

6. (a) $n = 7$

$$D_n = ?$$

$$D_n = \frac{n(n-3)}{2}$$

$$D_7 = \frac{7 \cdot (7-3)}{2}$$

$$D_7 = \frac{7 \cdot 4}{2}$$

$$\boxed{D_7 = 14}$$

(b) $D_{10} = 35$

(c) $D_{12} = 54$

(d) $D_{19} = 152$

7. (a) $n = 5$

$$K_n = ?$$

$$K_n = (n-2) \cdot 180^\circ$$

$$K_5 = (5-2) \cdot 180^\circ$$

$$K_5 = 3 \cdot 180^\circ$$

$$K_5 = 540^\circ$$

(b) $K_{12} = 1800^\circ$

(c) $K_{17} = 2700^\circ$

8. $D_n = 44$

$$n = ?$$

$$D_n = \frac{n(n-3)}{2}$$

$$44 = \frac{n(n-3)}{2} \quad | \cdot 2$$

$$88 = n(n-3)$$

$$\begin{array}{c} \downarrow \quad \downarrow \\ (11) \cdot 8 \\ \downarrow \end{array}$$

jedanaesterokut

9. $d_n = 20$

$$n = ?$$

$$D_n = ?$$

$$d_n = n - 3$$

$$20 = n - 3$$

$$n = 20 + 3$$

$$\boxed{n = 23}$$

$$D_{23} = \frac{23 \cdot (23-3)}{2}$$

$$D_{23} = \frac{23 \cdot 20}{2}$$

$$\boxed{D_{23} = 230}$$

10. $d_n + 2 = 5$

$$d_n = 5 - 2$$

$$d_n = 3$$

$$n = ?$$

$$d_n = n - 3$$

$$3 = n - 3$$

$$n = 3 + 3$$

$$\boxed{n = 6}$$

↓
šesterokut!

$$11. (a) K_n = 900^\circ$$

$$n = ?$$

$$K_n = (n-2) \cdot 180^\circ$$

$$900^\circ = (n-2) \cdot 180^\circ / : 180^\circ$$

$$5 = n - 2$$

$$n = 5 + 2$$

$$\boxed{n = 7}$$

$$(b) n = 10$$

$$(c) n = 22$$

$$12. (a) d_n = 9$$

$$n, K_n = ?$$

$$d_n = n - 2$$

$$9 = n - 2$$

$$n = 9 + 2$$

$$\boxed{n = 12}$$

$$K_{12} = (12-2) \cdot 180^\circ$$

$$K_{12} = 10 \cdot 180^\circ$$

$$K_{12} = 1800^\circ$$

$$(b)$$

$$n = 17$$

$$\boxed{K_{17} = 2700^\circ}$$

13.

$$(a) K_n = 1640^\circ$$

$$n = ?$$

$$K_n = (n-2) \cdot 180^\circ$$

$$1640^\circ = (n-2) \cdot 180^\circ / : 180^\circ$$

$$9.11 = n - 2$$

NE POSTOJI!

$$(b) K_n = 3040^\circ$$

$$n = ?$$

$$K_n = (n-2) \cdot 180^\circ$$

$$3040^\circ = (n-2) \cdot 180^\circ / : 180^\circ$$

$$16.88 = n - 2$$

NE POSTOJI!

$$14. (a) K_n = 720^\circ$$

$$D_n = ?$$

$$n = ?$$

$$K_n = (n-2) \cdot 180^\circ$$

$$720^\circ = (n-2) \cdot 180^\circ / : 180^\circ$$

$$4 = n - 2$$

$$n = 4 + 2$$

$$\boxed{n = 6}$$

$$D_6 = \frac{6 \cdot (6-3)}{2}$$

$$D_6 = \frac{6 \cdot 3}{2}$$

$$\boxed{D_6 = 9}$$

$$(b) n = 16$$

$$\underline{\underline{D_{16} = 104}}$$

$$15. \quad d_n + 2 = 15$$

$$K_n = ?$$

$$d_n = 15 - 2$$

$$d_n = 13$$

$$n = ?$$

$$d_n = n - 3$$

$$13 = n - 3$$

$$n = 13 + 3$$

$$\boxed{n = 16}$$

$$K_{16} = (16 - 2) \cdot 180^\circ$$

$$K_{16} = 14 \cdot 180^\circ$$

$$\boxed{K_{16} = 2520^\circ}$$

$$16. \quad K_n + 360^\circ = 3420^\circ$$

$$n = ?$$

$$K_n = 3420^\circ - 360^\circ$$

$$K_n = 3060^\circ$$

$$(n - 2) \cdot 180^\circ = 3060^\circ / : 180^\circ$$

$$n - 2 = 17$$

$$\boxed{n = 19} \quad \text{devetnaesterokut}$$

$$17. \quad K_n = 360^\circ + 1080^\circ$$

$$n = ?$$

$$K_n = 1440^\circ$$

$$(n - 2) \cdot 180^\circ = 1440^\circ / : 180^\circ$$

$$n - 2 = 8$$

$$\boxed{n = 10}$$

Kod
deseterokuta!

$$18. \quad K_n = 8 \cdot 360^\circ$$

$$n = ?$$

$$K_n = 2880^\circ$$

$$(n - 2) \cdot 180^\circ = 2880^\circ / : 180^\circ$$

$$n - 2 = 16$$

$$\boxed{n = 18}$$

$$(19.) \quad n = 6$$

$$(a) \quad d_n = ?$$

$$d_6 = \frac{(6 - 2) \cdot 180^\circ}{6}$$

$$d_6 = \frac{(6 - 2) \cdot 180^\circ}{6}$$

$$d_6 = \frac{4 \cdot 180^\circ}{6}$$

$$\boxed{d_6 = 120^\circ}$$

$$(b) \quad d_{12} = 150^\circ$$

$$(16) \quad n = 18$$

$$(20.) \quad (a) \quad d_n = 140^\circ$$

$$n = ?$$

$$d_n = \frac{(n - 2) \cdot 180^\circ}{n}$$

$$140^\circ = \frac{(n - 2) \cdot 180^\circ}{n}$$

$$140^\circ n = (n - 2) \cdot 180^\circ$$

$$140^\circ n = 180^\circ n - 360^\circ$$

$$140^\circ n - 180^\circ n = -360^\circ$$

$$-40^\circ n = -360^\circ$$

$$\boxed{n = 9}$$

$$21. \alpha_n = 130^\circ$$

$$n = ?$$

$$\alpha_n = \frac{(n-2) \cdot 180^\circ}{n}$$

$$130^\circ = \frac{(n-2) \cdot 180^\circ}{n} \quad | \cdot n$$

$$130^\circ n = (n-2) \cdot 180^\circ$$

$$130^\circ n = 180^\circ n - 360^\circ$$

$$130^\circ n - 180^\circ n = -360^\circ$$

$$-50^\circ n = -360 \quad | : (-50)$$

$$\boxed{n = 7.2}$$

↓
ne postoji!

$$23. (a) n = 8$$

$$\beta_n = ?$$

$$\beta_n = \frac{360^\circ}{n}$$

$$\beta_8 = \frac{360^\circ}{8}$$

$$\beta_8 = 45^\circ$$

$$(b) \beta_{10} = 36^\circ$$

$$(c) \beta_{12} = 30^\circ$$

$$22. \alpha_n = 135^\circ$$

$$D_n = ?$$

$$\alpha_n = \frac{(n-2) \cdot 180^\circ}{n}$$

$$135^\circ = \frac{(n-2) \cdot 180^\circ}{n} \quad | \cdot n$$

$$135^\circ n = 180^\circ n - 360^\circ$$

$$135^\circ n - 180^\circ n = -360^\circ$$

$$-45^\circ n = -360 \quad | : (-45^\circ)$$

$$\boxed{n = 8}$$

$$D_8 = \frac{8 \cdot (8-3)}{2}$$

$$D_8 = \frac{8 \cdot 5}{2}$$

$$\boxed{D_8 = 20}$$

$$24. (a) \beta_n = 20^\circ$$

$$n = ?$$

$$\beta_n = \frac{360^\circ}{n}$$

$$20^\circ = \frac{360^\circ}{n} \quad | \cdot n$$

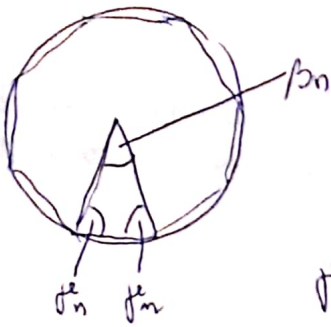
$$20^\circ n = 360^\circ \quad | : 20^\circ$$

$$\boxed{n = 18}$$

$$(b) n = 15$$

$$(c) n = 8$$

25.



(a) $n=8$

$$\beta_8 = \frac{360^\circ}{8}$$

$$\beta_8 = 45^\circ$$

$$\delta_8^i = (180^\circ - \beta_8) : 2$$

$$\delta_8^i = (180^\circ - 45^\circ) : 2$$

$$\delta_8^i = 67,5^\circ$$

(b) $n=9$

$$\beta_9 = \frac{360^\circ}{9}$$

$$\beta_9 = 40^\circ$$

$$\delta_9^i = (180^\circ - \beta_9) : 2$$

$$\delta_9^i = (180^\circ - 40^\circ) : 2$$

$$\delta_9^i = 70^\circ$$

$$\delta_9^i = 70^\circ$$

26.

$n=8$

$a = 15,4 \text{ dm}$

$\sigma = n \cdot a$

$\sigma = 8 \cdot 15,4 \text{ dm}$

$\sigma = 123,2 \text{ dm}$

27. $n=9$

$\sigma = 2,25 \text{ m}$

$a = ?$

$a = \sigma : n$

$a = 2,25 : 9$

$a = 0,25 \text{ m}$

28. $a = 2,8 \text{ cm} = 28 \text{ mm}$

$\sigma = 224 \text{ mm}$

$n = \sigma : a$

$n = 224 : 28$

$n = 8$

osmerokut

29. $K_n = 1800^\circ$

$a = 3 \text{ cm}$

$\sigma = ?$

$K_n = (n-2) \cdot 180^\circ$

$1800^\circ = (n-2) \cdot 180^\circ : 180^\circ$

$10 = n - 2$

$n = 10 + 2$

$n = 12$

$\sigma = n \cdot a$

$\sigma = 12 \cdot 3 \text{ cm}$

$\sigma = 36 \text{ cm}$

30. $a = 3 \text{ m}$

$d = 60 \text{ cm} = 0,6 \text{ m}$

$n = 8$

$\sigma = n \cdot a$

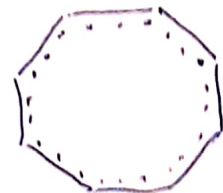
$\sigma = 8 \cdot 3 \text{ m}$

$\sigma = 24 \text{ m}$

$N = \frac{\sigma}{d}$

$N = \frac{24 \text{ m}}{0,6 \text{ m}}$

$N = 40 \text{ sadnica}$



31. $a = 4 \text{ cm}$

$v_a = 3.5 \text{ cm}$

$n = 7$

(vinaia totaliterationem
totala = polimpe upisane
kretnio)

$$P_{\Delta} = \frac{a \cdot v_a}{2}$$

$$P = n \cdot P_{\Delta}$$

$$P_{\Delta} = \frac{4 \cdot 3.5}{2}$$

$$P = 7 \cdot 7 \text{ cm}^2$$

$$P = 49 \text{ cm}^2$$

$$P_{\Delta} = 7 \text{ cm}^2$$

33. $n = 8$

$\beta = ?$

$K_8 = ?$

$$K_8 = (8 - 2) \cdot 180^\circ$$

$$K_8 = 6 \cdot 180^\circ$$

$$K_8 = 1080^\circ$$

$$\beta = K_8 - (90^\circ + 157^\circ + 160^\circ + 130^\circ + 123^\circ + 162^\circ + 134^\circ)$$

$$\beta = 1080^\circ - 956^\circ$$

$$\beta = 124^\circ$$

$n = 6$

$a = 15 \text{ mm}$

$v_a = 13 \text{ mm}$

$$P_{\Delta} = \frac{a \cdot v_a}{2}$$

$$P = n \cdot P_{\Delta}$$

$$P_{\Delta} = \frac{15 \cdot 13}{2}$$

$$P = 6 \cdot 97.5 \text{ mm}^2$$

$$P_{\Delta} = \frac{195}{2}$$

$$P = 585 \text{ mm}^2$$

$$P_{\Delta} = 97.5 \text{ mm}^2$$