

1. A - besede brez samoglasnika

$$P(A) = \frac{m}{n} = \frac{24}{120} = \frac{1}{5}$$

$$m = \underline{6} \underline{5} \underline{4} = 120 \quad m = \underline{4} \underline{3} \underline{2} = 24 \quad \checkmark$$

ANDREJ - G R T

samoglasniki: N D R J

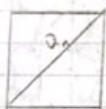
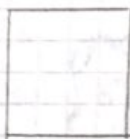
B - besede imo dva samoglasnika

$$P(B) = \frac{m}{n} = \frac{24}{120} = \frac{24}{120} = \frac{1}{5} \quad m = 6 \cdot 4 = 24 \quad \checkmark$$

$$m = 120 \quad m = \frac{1}{1} \frac{4}{E} \frac{4}{1} = 1 \quad \text{ALI} \quad \frac{1}{E} \frac{1}{A} \frac{4}{1} \quad \text{ALI} \quad \frac{1}{E} \frac{4}{A} \frac{1}{1}$$

2. kvadrat 1

kvadrat 2



$$S = S_1 + S_2 + S_3 + \dots$$

$$S = a_1^2 + a_2^2 + a_3^2 + \dots \quad \checkmark$$

$$a_2^2 = ?$$

$$d = a_1 \sqrt{2}$$

$$a_1 - a_2 = \sqrt{2}$$

$$a_2 = \frac{a_1}{\sqrt{2}} = \frac{a_1 \sqrt{2}}{2}$$

$$S = a_1^2 + \left(\frac{a_1 \sqrt{2}}{2}\right)^2 + \dots$$

$$S = \frac{a_1}{1-k}$$

$$a_1 = a_1^2$$

$$k = \frac{a_2}{a_1} = \frac{a_1 \sqrt{2}}{2 a_1} = \frac{\sqrt{2}}{2}$$

$$\frac{a_1^2 \cdot 2}{\frac{a_1^2}{1}} = \frac{2a_1^2}{1} = 2a_1^2$$

$$= \frac{2a_1^2}{4a_1^2} = \frac{1}{2}$$

$$S = \frac{a_1^2}{1 - \frac{1}{2}} = \frac{a_1^2}{\frac{1}{2}} = \frac{2a_1^2}{1} = 2a_1^2 \quad \checkmark$$

3. 1, 2, 3, 5, 6, 7

a) c ponogonjem  $\underline{6} \underline{6} \underline{6} = 6^3 = 216 \quad \checkmark$

b) svih števil  $\Rightarrow$  kombo se  $\geq 2$  ALI  $\leq 6$

$$\frac{6}{6} \frac{6}{2} \frac{1}{1} = 36$$

$$\text{ALI} \quad \underline{6} \underline{6} \frac{1}{6} = 36$$

$$2 \cdot 36 = 72 \quad \checkmark$$

c) deglikih  $\Rightarrow 5 \Rightarrow$  kombo se s cipra 5

$$\frac{6}{6} \frac{6}{5} \frac{1}{5} = 36 \quad \checkmark$$

d) množih od 500  $\Rightarrow$

$$\frac{1}{1} \frac{6}{6} \frac{6}{6}$$

$$\text{ALI} \quad \frac{1}{2} \frac{6}{6} \frac{6}{6}$$

$$\text{ALI} \quad \frac{1}{3} \frac{6}{6} \frac{6}{6}$$

$$= 3 \cdot 36 = 108 \quad \checkmark$$

- 4 M
- 3 M
- 2 M
- 1 M
- 3 F
- 2 F
- 1 F

$m = 3! \cdot 4! = 144$

A - 144 pada 712

$P(A) = \frac{m}{n} = \frac{144}{5040} = \frac{1}{35}$

$m = 4! = 24$

$\binom{5}{4} = \binom{5}{1}$

16

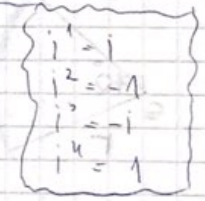
15  $(\sqrt{3} - 2i)^5 = \binom{5}{0} (\sqrt{3})^5 \cdot (-2i)^0 + \binom{5}{1} (\sqrt{3})^4 \cdot (-2i)^1 + \binom{5}{2} (\sqrt{3})^3 \cdot (-2i)^2$   
 $+ \binom{5}{3} (\sqrt{3})^2 \cdot (-2i)^3 + \binom{5}{4} (\sqrt{3})^1 \cdot (-2i)^4 + \binom{5}{5} (\sqrt{3})^0 \cdot (-2i)^5 =$

$= 1 \cdot 9\sqrt{3} \cdot 1 + 5 \cdot 9 \cdot (-2i) + \frac{5 \cdot 4^2}{1 \cdot 2^2} \cdot 3\sqrt{3} \cdot 4i^2 +$   
 $\frac{5 \cdot 4^3}{1 \cdot 2^3} \cdot 3(-8i^3) + 5\sqrt{3} \cdot 16i^4 + 1 \cdot 1 \cdot (-32i^5) =$

$= 9\sqrt{3} - 90i + 120\sqrt{3} \cdot (-1) + (-240)(-i) + 80\sqrt{3} - 32i =$

$= 9\sqrt{3} - 90i - 120\sqrt{3} + 240i + 80\sqrt{3} - 32i =$

$= -31\sqrt{3} + 118i$



16 A - 1501 empat pada empat

$P(A) = \frac{m}{n} = \frac{11}{36}$

$m = 6 \cdot 6 = 36$       $m = \frac{1 \cdot 5}{6} + \frac{5 \cdot 1}{6} + \frac{1}{6} + \frac{1}{6} = 11$

B - v drage m meth pada veje st pik, kot v prvem

$P(B) = \frac{m}{n} = \frac{15}{36} = \frac{5}{12}$

$m = 2$

1 2	2 3	3 4	4 5	5 6
1 3	2 4	3 5	4 6	
1 4	2 5	3 6		
1 5	2 6			
1 6				

C - v doh meth pada enob st pik

$P(C) = \frac{m}{n} = \frac{6}{36} = \frac{1}{6}$

$m =$  obakat 1 ALI dokrat 2 ALI...  $\Rightarrow 6$  kpdnih meth

Y) množica z m elementi ima  $\Rightarrow$

$2^m$  podmnožic ✓

b) \* komplementni dogodek je dogodek, ki se zgodi, ko se prvotni dogodek ne zgodi. ✓

oznava  $\bar{A}$   $A \cap \bar{A} = \emptyset$   $A \cup \bar{A} = \Omega$  ✓

\* kjezo verjetnost podmnožice it dodatno (verjetnost dogodka in njegove negacije vedno 1)

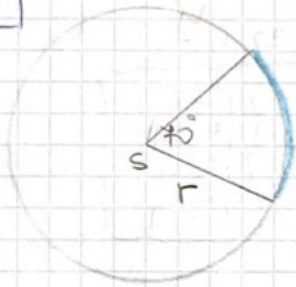
$P(\bar{A}) + P(A) = 1$

$P(\bar{A}) = 1 - P(A)$  ✓

~ dodatna naloga (D.N.) ~

8.

$r = 17 \text{ cm}$   
 $\alpha = 70^\circ$



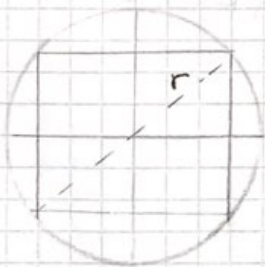
$\rightarrow$  zvižemo v nov krog

$e = \frac{\pi r \alpha}{180}$

$e = \frac{\pi \cdot 17 \cdot 70}{180} = \frac{119\pi}{18} \text{ cm}$

nov krog

$r = \frac{d}{2}$   $d = a\sqrt{2}$   $a = 2$



$r = ?$   $e =$  obseg novega kroga

$\frac{119\pi}{18} = 2\pi r \quad | : \pi$

$119 = 36r$

$r = \frac{119}{36} = 3,3$  ✓

10/10

$3,3 = \frac{a\sqrt{2}}{2} \quad | \cdot 2$

$6,6 = a\sqrt{2}$

$a = \frac{6,6}{\sqrt{2}} = \frac{6,6\sqrt{2}}{2} = 4,7 \text{ cm}$  ✓

\* Poznamo kvadrat

$S = a^2 = 4,7^2 = 22,09 \text{ cm}^2$  ✓

Lepa!!! odd (5) A# Topley