4)

$H_1 - д$ $H_1 - д|д$

$H_2 - ч$ $H_2 - д|ч$

$H_{11} - д$ $H_3 - ч|д$

$H_{*12} - ч$ $H_4 - ч|ч$

$H_{21} -$

$P(H_1) = \dfrac{4}{10} \cdot \dfrac{3}{11}$ $P_{H_1}(A) = \dfrac{6}{12}$

$P(H_2) = \dfrac{4}{10} \cdot \dfrac{6}{11}$ $P_{H_2}(A) = \dfrac{5}{12}$

$P(H_3) = \dfrac{6}{10} \cdot \dfrac{4}{11}$ $P_{H_3}(A) = \dfrac{5}{12}$

$P(H_4) = \dfrac{6}{10} \cdot \dfrac{7}{11}$ $P_{H_4}(H) = \dfrac{4}{12}$

$$P(A) = \frac{4}{10} \cdot \frac{5}{11} \cdot \frac{6}{12} + \frac{4}{10} \cdot \frac{6}{11} \cdot \frac{5}{12} + \frac{6}{10} \cdot \frac{4}{11} \cdot \frac{5}{12} +$$

$$+ \frac{6}{10} \cdot \frac{7}{11} \cdot \frac{4}{12} = \boxed{\frac{2}{5}}$$

2) $ax = 6$ $\qquad$ $0 \leq a \leq 8$

$\quad x = \dfrac{6}{a}$ $\qquad$ $0 \leq b \leq 10$

$\dfrac{6}{a} \geq 1$

$b \geq a$

$S_{\square} = 8 \cdot 10 = 80$

$S_{\triangle} = \dfrac{1}{2} S_{\square} = \dfrac{1}{2} \cdot 64 = 32$

$P = \dfrac{32}{80} = \dfrac{16}{40} = \dfrac{8}{20} = \dfrac{4}{10} = \boxed{\dfrac{2}{5}}$

5) $n = 100$ | $10 - b$

H_1 – відмінник (10)
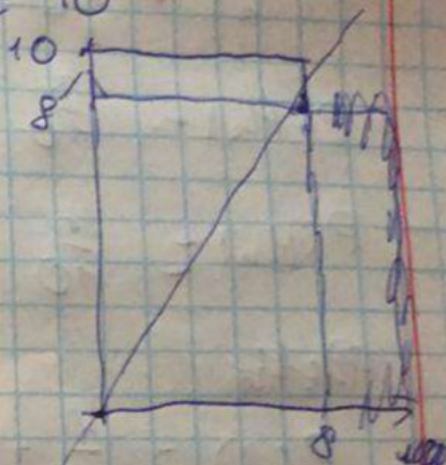
H_2 – 4,5 б. (50)

H_3 – здав (30)

H_4 – незадов. (10)

$$P_{(H_1)} = \frac{1}{10} \qquad P_{H_1}(A) = 1-0,98$$

$$P_{(H_2)} = \frac{1}{2} \qquad P_{H_2}(H) = 1-0,77$$

$$P_{(H_3)} = \frac{3}{10} \qquad P_{H_3}(A) = 1-0,48$$

$$P_{(H_4)} = \frac{1}{10} \qquad P_{H_4}(A) = 1-0,17$$

$$P(A) = \frac{1}{10} \cdot 0,02 + \frac{1}{2} \cdot 0,23 + \frac{3}{10} \cdot 0,52 +$$

$$+ \frac{1}{10} \cdot 0,83 = \frac{89}{250}$$

$$P_A(H_3) = \frac{\frac{3}{10} \cdot 0,52}{\frac{89}{250}} = \boxed{\frac{39}{89}} \approx 0,43$$

4) $\quad \dfrac{8! \cdot 11! \cdot 9!}{5! \cdot 3! \cdot 20!}$

3) $\quad p = \dfrac{1}{10} \cdot \dfrac{3}{10} \cdot \dfrac{6}{10}$

a)

б

НГ№о

а) $\dfrac{6}{10} \cdot \dfrac{4}{10} + \dfrac{6}{10} \cdot \dfrac{6}{10}$

б) $\dfrac{6}{10} \cdot \dfrac{6}{10} + \dfrac{3}{10} \cdot \dfrac{3}{10} + \dfrac{1}{10} \cdot \dfrac{1}{10}$