

**1.** Вероятность попадания в цель при первом выстреле 0,2, при втором 0,3, при третьем 0,6. Вероятность поражения цели при одном попадании 0,3, при двух 0,4, при трех 0,9. Найти вероятность поражения цели при трех выстрелах. **0,2796**

**2.** 3 5 8; 3 4 9. 0,394 **3.** 2 5 8; 2 4 8. 0,316 **4.** 2 4 7; 2 3 4. 0,2156 **5.** 5 7 8; 3 6 9. 0,6 **6.** 4 5 7; 5 6 9. 0,552 **7.** 3 4 8; 6 7 9. 0,6176 **8.** 2 6 9; 2 3 8. 0,31 **9.** 2 4 9; 2 3 4. 0,2452 **10.** 5 6 8; 3 4 5. 0,382 **11.** 4 6 7; 2 3 9. 0,3468 **12.** 2 4 5; 2 4 6. 0,22 **13.** 6 7 8; 2 3 9. 0,4756 **14.** 3 7 9; 1 2 8. 0,2845 **15.** 4 7 9; 2 3 8. 0,399 **16.** 3 4 6; 2 3 6. 0,2276

**2.** Вероятность, что каждый из 5 имеющихся приборов включен, равна 0,4. Найти вероятность того, что в данный момент времени включены 4 прибора. 0,13824

**2.** 5 0,8 **3.** 0,2048 **3.** 6 0,2 **4.** 0,01536 **4.** 6 0,6 **3.** 0,27648 **5.** 6 0,8 **4.** 0,24576 **6.** 5 0,4 **3.** 0,2304 **7.** 5 0,2 **3.** 0,0512 **8.** 5 0,7 **3.** 0,3087 **9.** 5 0,6 **3.** 0,3456 **10.** 5 0,9 **3.** 0,0729 **11.** 6 0,4 **3.** 0,27648

**3.** В партии из 36 изделий 3 нестандартных. Найти вероятность того, что 2 из 4х наудачу взятых изделий окажутся стандартными. 0,026890756 **2.** 22 13 3 5. 0,248803827 **3.** 38 10 2 4. 0,230440967

**4.** 52 16 3 4. 0,421978021 **5.** 25 12 2 4. 0,406956521 **6.** 28 7 2 5. 0,074783624 **7.** 25 18 3 5. 0,100790513

**8.** 32 15 2 4. 0,397107897 **9.** 26 11 2 4. 0,386287625 **10.** 27 12 3 5. 0,371980676 **11.** 35 5 3 4. 0,387700534

**4.** В первой корзине 2 яблока и 6 лимонов, во второй 8 яблок 3 лимона. Из первой корзины во вторую переложили 7 фруктов. 0,54166666

**2.** 4 5 8 6. 8. 0,47474747 **3.** 3 9 5 8. 11. 0,322916666 **4.** 6 7 8 2. 12. 0,384615384 **5.** 3 4 5 2. 6. 0,582417582 **5.** 6 4 3 5. 9. 0,505882352 **6.** 6 3 8 7. 8. 0,579710144 **7.** 5 8 3 7. 12. 0,653846153 **8.** 2 4 8 3. 5. 0,60416 **9.** 6 3 7 8. 8. 0,463768 **10.** 4 2 8 5. 5. 0,629629629 **11.** 7 6 4 8. 12. 0,564102 **12.** 2 8 9 4. 9. 0,49090909 **13.** 8 4 5 7. 11. 0,46376811 **14.** 6 2 7 5. 7. 0,644736842 **15.** 3 9 4 5. 11. 0,6625 **16.** 8 3 5 9. 10. 0,511363636

**5.** Известно, что из ста деталей... 10 40 1. 0,142857 **2.** 26 13 2. 0,298387 **3.** 16 35 1. 0,261306 **4.** 36 15 -. 0,238805

**5.** 23 12 1. 0,686567 **6.** 14 25 2. 0,671875 **7.** 40 10 1. 0,857142 **8.** 30 15 2. 0,29166 **9.** 19 38 1. 0,276785 **10.** 25 36 2. 0,627906 **11.** 12 35 1. 0,202072 **12.** 40 18 2. 0,247706 **13.** 15 30 1. 0,29166 **14.** 28 15 2. 0,312138 **15.** 37 25 1. 0,637931 **16.** 35 14 2. 0,232142 **17.** 10 30 1. 0,205882 **18.** 20 36 2. 0,692307 **19.** 12 25 1. 0,290322 **20.** 25 39 2. 0,657303 **21.** 18 30 1. 0,338709 **22.** 40 25 2. 0,333333 **23.** 25 12 1. 0,709677 **24.** 28 10 2. 0,222222 **25.** 15 40 1. 0,209302 **26.** 13 25 2. 0,690476 **27.** 14 35 1. 0,232142 **28.** 40 14 2. 0,196261 **29.** 36 25 1. 0,627906 **30.** 35 20 2. 0,317073 **31.** 30 10 1. 0,794117 **32.** 38 25 2. 0,3522727 **33.** 33 20 1. 0,663316

Дисперсия:

"3,21"	"47ver0008.png" />
"4,44"	"47ver0055.png" />
"7,61"	"47ver0066.png" />
"7,76"	"47ver0113.png" />
"3,09"	"47ver0124.png" />
"1,96"	"47ver0171.png" />
"3,45"	"47ver0182.png" />
"4,45"	"47ver0153.png" />
"7,21"	"47ver0142.png" />
"7,09"	"47ver0095.png" />
"4,89"	"47ver0084.png" />
"4,89"	"47ver0037.png" />
"4,89"	"47ver0026.png" />

Случайная величина x может принимать 2 значения:

"1,171875"	"4,047619047"	"6,818181818"
"47ver0001.png" />	"47ver0070.png" />	"47ver0135.png" />
"47ver0002.png" />	"47ver0071.png" />	"47ver0136.png" />
"47ver0003.png" />	"47ver0072.png" />	"47ver0137.png" />
"47ver0004.png" />	"47ver0073.png" />	"47ver0138.png" />
"5,357142857"	"3,4375"	"5,6818181818"
"47ver0012.png" />	"47ver0077.png" />	"47ver0146.png" />
"47ver0013.png" />	"47ver0078.png" />	"47ver0147.png" />
"47ver0014.png" />	"47ver0079.png" />	"47ver0148.png" />
"47ver0015.png" />	"47ver0080.png" />	"47ver0149.png" />
"2,272727272"	"2,34375"	"2,94117647"
"47ver0019.png" />	"47ver0088.png" />	"47ver0157.png" />
"47ver0020.png" />	"47ver0089.png" />	"47ver0158.png" />
"47ver0021.png" />	"47ver0090.png" />	"47ver0159.png" />
"47ver0022.png" />	"47ver0091.png" />	"47ver0160.png" />
"10,8333333333"	"6,41025641"	"3,428571428"
"47ver0030.png" />	"47ver0099.png" />	"47ver0164.png" />
"47ver0031.png" />	"47ver0100.png" />	"47ver0165.png" />
"47ver0032.png" />	"47ver0101.png" />	"47ver0166.png" />
"47ver0033.png" />	"47ver0102.png" />	"47ver0167.png" />
"36,231834"	"1,315789473"	"2,8125"
"47ver0041.png" />	"47ver0106.png" />	"47ver0175.png" />
"47ver0042.png" />	"47ver0107.png" />	"47ver0176.png" />
"47ver0043.png" />	"47ver0108.png" />	"47ver0177.png" />
"47ver0044.png" />	"47ver0109.png" />	"47ver0178.png" />
"2,272727272"	"5,8333333333"	"2,857142857"
"47ver0048.png" />	"47ver0117.png" />	"47ver0186.png" />
"47ver0049.png" />	"47ver0118.png" />	"47ver0187.png" />
"47ver0050.png" />	"47ver0119.png" />	"47ver0188.png" />
"47ver0051.png" />	"47ver0120.png" />	"47ver0189.png" />
"1,4583333333"	"3,8888888888"	"47ver0128.png" />
"47ver0059.png" />	"47ver0129.png" />	"47ver0130.png" />
"47ver0060.png" />	"47ver0131.png" />	"47ver0062.png" />

Найти вероятность попадания случайной величины:

"622448979"	"683641975"	"572530864"
"47ver0005.png" />	"47ver0074.png" />	"47ver0132.png" />
"47ver0006.png" />	"47ver0075.png" />	"47ver0133.png" />
"734375"	"919753085"	"697777777"
"47ver0009.png" />	"47ver0081.png" />	"47ver0139.png" />
"47ver0010.png" />	"47ver0082.png" />	"47ver0140.png" />
"37755102"	"887345679"	"64875"
"47ver0016.png" />	"47ver0085.png" />	"47ver0143.png" />
"47ver0017.png" />	"47ver0086.png" />	"47ver0144.png" />
"6484375"	"887345679"	"924444444"
"47ver0023.png" />	"47ver0092.png" />	"47ver0150.png" />
"47ver0024.png" />	"47ver0093.png" />	"47ver0151.png" />
"679012345"	"450617283"	"734693877"
"47ver0027.png" />	"47ver0096.png" />	"47ver0154.png" />
"47ver0028.png" />	"47ver0097.png" />	"47ver0155.png" />
"7734375"	"876543209"	"704861111"
"47ver0034.png" />	"47ver0103.png" />	"47ver0161.png" />
"47ver0035.png" />	"47ver0104.png" />	"47ver0162.png" />
"764444444"	"540816376"	"795918367"
"47ver0038.png" />	"47ver0110.png" />	"47ver0168.png" />
"47ver0039.png" />	"47ver0111.png" />	"47ver0169.png" />
"609375"	"6875"	"572530864"
"47ver0045.png" />	"47ver0114.png" />	"47ver0172.png" />
"47ver0046.png" />	"47ver0115.png" />	"47ver0173.png" />
"831790123"	"597777777"	"764444444"
"47ver0052.png" />	"47ver0121.png" />	"47ver0179.png" />
"47ver0053.png" />	"47ver0122.png" />	"47ver0180.png" />
"64875"	"638888888"	"609375"
"47ver0056.png" />	"47ver0125.png" />	"47ver0183.png" />
"47ver0057.png" />	"47ver0126.png" />	"47ver0184.png" />
"776234567"		"679012345"
"47ver0063.png" />		"47ver0190.png" />
"47ver0064.png" />		"47ver0191.png" />
"711734603"		
"47ver0067.png" />		
"47ver0068.png" />		

Найти мат.ожидание случайной величины:

"291666666"	"488888888"	"47ver0105.png" />
"47ver0007.png" />	"179487179"	"47ver0112.png" />
"666666666"	"47ver0112.png" />	
"47ver0011.png" />	"45614035"	"47ver0116.png" />
"33333333333"	"47ver0116.png" />	
"47ver0018.png" />	"1814814814"	"47ver0123.png" />
"215666274"	"47ver0123.png" />	
"47ver0025.png" />	"092592592"	"47ver0127.png" />
"757575757"	"47ver0127.png" />	
"47ver0029.png" />	"1629629629"	"47ver0134.png" />
"19047619"	"47ver0134.png" />	
"47ver0036.png" />	"3416666666"	"47ver0141.png" />
"3416666666"	"47ver0040.png" />	
"47ver0040.png" />	"5208333333"	"47ver0147.png" />
"5208333333"	"47ver0047.png" />	
"47ver0047.png" />	"1388888888"	"47ver0054.png" />
"1388888888"	"47ver0054.png" />	
"47ver0058.png" />	"122807017"	"47ver0156.png" />
"47ver0058.png" />	"47ver0058.png" />	
"148148148"	"722222222"	"47ver0156.png" />
"47ver0065.png" />	"47ver0156.png" />	
"47ver0065.png" />	"1444444444"	"47ver0170.png" />
"2476190476"	"47ver0170.png" />	
"47ver0069.png" />	"809523809"	"47ver0174.png" />
"47ver0069.png" />	"47ver0174.png" />	
"466666666"	"15833333333"	"47ver0181.png" />
"47ver0076.png" />	"47ver0181.png" />	
"238095238"	"47ver0083.png" />	"229166666"
"47ver0083.png" />	"47ver0185.png" />	"47ver0185.png" />
"45555555555"	"47ver0185.png" />	
"47ver0087.png" />	"696969696"	"47ver0192.png" />
"47ver0087.png" />	"47ver0192.png" />	
"431372549"		
"47ver0094.png" />		
"242424242"		
"47ver0098.png" />		

## СТАТИСТИКА

Двумерная случайная величина:

"34 "49sta0001.png" /> "49sta0002.png" />	"32 "49sta0183.png" /> "49sta0184.png" />	"44 "49sta0287.png" /> "49sta0288.png" />
"3 "50sta0001.png" /> "50sta0002.png" />	"48 "49sta0196.png" /> "49sta0197.png" />	"32 "49sta0300.png" /> "49sta0301.png" />
"24 "49sta0027.png" /> "49sta0028.png" />	"34 "49sta0209.png" /> "49sta0210.png" />	"44 "49sta0313.png" /> "49sta0314.png" />
"42 "49sta0040.png" /> "49sta0041.png" />	"3 "49sta0222.png" /> "49sta0223.png" />	"44 "49sta0326.png" /> "49sta0327.png" />
"2 "49sta0053.png" /> "49sta0054.png" />	"34 "49sta0235.png" /> "49sta0236.png" />	"3 "49sta0339.png" /> "49sta0340.png" />
"3 "49sta0066.png" /> "49sta0067.png" />	"46 "49sta0248.png" /> "49sta0249.png" />	"58 "49sta0352.png" /> "49sta0353.png" />
"46 "49sta0079.png" /> "49sta0080.png" />	"28 "49sta0261.png" /> "49sta0262.png" />	"36 "49sta0365.png" /> "49sta0366.png" />
"44 "49sta0092.png" /> "49sta0093.png" />	"42 "49sta0274.png" /> "49sta0275.png" />	"32 "49sta0378.png" /> "49sta0379.png" />
"32 "49sta0105.png" /> "49sta0106.png" />	"3 "49sta0118.png" /> "49sta0119.png" />	"58 "49sta0391.png" /> "49sta0392.png" />
"34 "49sta0131.png" /> "49sta0132.png" />	"38 "49sta0404.png" /> "49sta0405.png" />	"32 "49sta0417.png" /> "49sta0418.png" />
"26 "49sta0144.png" /> "49sta0145.png" />	"45 "49sta0014.png" /> "49sta0015.png" />	
"38 "49sta0157.png" /> "49sta0158.png" />		
"48 "49sta0170.png" /> "49sta0171.png" />		

Найти условное мат.ожидание:

"12" "49sta0003.png" /> "49sta0004.png" />	"14" "49sta0146.png" /> "49sta0147.png" />	"15" "49sta0289.png" /> "49sta0290.png" />
"6" "50sta0003.png" /> "50sta0004.png" />	"12" "49sta0159.png" /> "49sta0160.png" />	"13" "49sta0302.png" /> "49sta0303.png" />
"6" "49sta0029.png" /> "49sta0030.png" />	"11" "49sta0172.png" /> "49sta0173.png" />	"7" "49sta0315.png" /> "49sta0316.png" />
"12" "49sta0042.png" /> "49sta0043.png" />	"11" "49sta0185.png" /> "49sta0186.png" />	"8" "49sta0328.png" /> "49sta0329.png" />
"5" "49sta0055.png" /> "49sta0056.png" />	"10" "49sta0198.png" /> "49sta0199.png" />	"13" "49sta0341.png" /> "49sta0342.png" />
"7" "49sta0068.png" /> "49sta0069.png" />	"8" "49sta0211.png" /> "49sta0212.png" />	"13" "49sta0354.png" /> "49sta0355.png" />
"5" "49sta0081.png" /> "49sta0082.png" />	"12" "49sta0224.png" /> "49sta0225.png" />	"9" "49sta0367.png" /> "49sta0368.png" />
"10" "49sta0094.png" /> "49sta0095.png" />	"9" "49sta0237.png" /> "49sta0238.png" />	"7" "49sta0380.png" /> "49sta0381.png" />
"11" "49sta0107.png" /> "49sta0108.png" />	"5" "49sta0250.png" /> "49sta0251.png" />	"14" "49sta0393.png" /> "49sta0394.png" />
"13" "49sta0120.png" /> "49sta0121.png" />	"5" "49sta0263.png" /> "49sta0264.png" />	"10" "49sta0406.png" /> "49sta0407.png" />
"7" "49sta0133.png" /> "49sta0134.png" />	"9" "49sta0276.png" />	"9" "49sta0419.png" /> "49sta0420.png" />
		"7" "49sta0016.png" /> "49sta0017.png" />

Найти ковариацию:

"49sta0343.png"	"49sta0369.png"	"49sta0382.png"	"49sta0395.png"	"49sta0408.png"	"49sta0421.png"	"49sta0018.png"
6	5	2	5	6	8	



Найти длину доверительного интервала:

1,8675" "49sta0370.png" "49sta0371.png" "49sta0372.png" "49sta0373.png" "49sta0374.png" "49sta0375.png" "49sta0376.png" "49sta0377.png"	"2,1169" "49sta0110.png" "49sta0111.png" "49sta0112.png" "49sta0113.png" "49sta0114.png" "49sta0115.png" "49sta0116.png" "49sta0117.png"	"2,3071" "49sta0149.png" "49sta0150.png" "49sta0151.png" "49sta0152.png" "49sta0153.png" "49sta0154.png" "49sta0155.png" "49sta0156.png"	"49sta0012.png" "49sta0013.png"	"1,2639" "49sta0214.png" "49sta0215.png" "49sta0216.png" "49sta0217.png" "49sta0218.png" "49sta0219.png" "49sta0220.png" "49sta0221.png"	"1,4643" "49sta0357.png" "49sta0358.png" "49sta0359.png" "49sta0360.png" "49sta0361.png" "49sta0362.png" "49sta0363.png" "49sta0364.png"
"1,6413" "50sta0006.png" "50sta0007.png" "50sta0008.png" "50sta0009.png" "50sta0010.png" "50sta0011.png" "50sta0012.png" "50sta0013.png"	"2,2666" "49sta0136.png" "49sta0137.png" "49sta0138.png" "49sta0139.png" "49sta0140.png" "49sta0141.png" "49sta0142.png" "49sta0143.png"	"1,7229" "49sta0162.png" "49sta0163.png" "49sta0164.png" "49sta0165.png" "49sta0166.png" "49sta0167.png" "49sta0168.png" "49sta0169.png"		"2,092" "49sta0253.png" "49sta0254.png" "49sta0255.png" "49sta0256.png" "49sta0257.png" "49sta0258.png" "49sta0259.png" "49sta0260.png"	"1,8331" "49sta0396.png" "49sta0397.png" "49sta0398.png" "49sta0399.png" "49sta0400.png" "49sta0401.png" "49sta0402.png" "49sta0403.png"
"2,4123" "49sta0383.png" "49sta0384.png" "49sta0385.png" "49sta0386.png" "49sta0387.png" "49sta0388.png" "49sta0389.png" "49sta0390.png"	"1,4093" "49sta0006.png" "49sta0007.png" "49sta0008.png" "49sta0009.png" "49sta0010.png" "49sta0011.png" "49sta0061.png" "49sta0062.png" "49sta0063.png" "49sta0064.png" "49sta0065.png"	"1,7416" "49sta0175.png" "49sta0176.png" "49sta0177.png" "49sta0178.png" "49sta0179.png" "49sta0180.png" "49sta0181.png" "49sta0182.png"		"1,5265" "49sta0279.png" "49sta0280.png" "49sta0281.png" "49sta0282.png" "49sta0283.png" "49sta0284.png" "49sta0285.png" "49sta0286.png"	"1,9688" "49sta0045.png" "49sta0046.png" "49sta0047.png" "49sta0048.png" "49sta0049.png" "49sta0050.png" "49sta0051.png" "49sta0052.png"
"1,1857" "49sta0409.png" "49sta0410.png" "49sta0411.png" "49sta0412.png" "49sta0413.png" "49sta0414.png" "49sta0415.png" "49sta0416.png"	"2,5085" "49sta0084.png" "49sta0085.png" "49sta0086.png" "49sta0087.png" "49sta0088.png" "49sta0089.png" "49sta0090.png" "49sta0091.png"	"1,3089" "49sta0188.png" "49sta0189.png" "49sta0190.png" "49sta0191.png" "49sta0192.png" "49sta0193.png" "49sta0194.png" "49sta0195.png"		"2,3206" "49sta0019.png" "49sta0020.png" "49sta0021.png" "49sta0022.png" "49sta0023.png" "49sta0024.png" "49sta0025.png" "49sta0026.png"	"1,7575" "49sta0058.png" "49sta0059.png" "49sta0060.png"
1,3122 "49sta0422.png" "49sta0423.png" "49sta0424.png" "49sta0425.png" "49sta0426.png" "49sta0427.png" "49sta0428.png" "49sta0429.png"	"1,4287" "49sta0097.png" "49sta0098.png" "49sta0099.png" "49sta0100.png" "49sta0101.png" "49sta0102.png" "49sta0103.png" "49sta0104.png"	"1,1542" "49sta0201.png" "49sta0202.png" "49sta0203.png" "49sta0204.png" "49sta0205.png" "49sta0206.png" "49sta0207.png" "49sta0208.png"			"49sta0228.png" "49sta0229.png" "49sta0230.png" "49sta0231.png" "49sta0232.png" "49sta0233.png" "49sta0234.png"
2,0066 "49sta0071.png" "49sta0072.png" "49sta0073.png" "49sta0074.png" "49sta0075.png" "49sta0076.png" "49sta0077.png" "49sta0078.png"	"1,536" "49sta0123.png" "49sta0124.png" "49sta0125.png" "49sta0126.png" "49sta0127.png" "49sta0128.png" "49sta0129.png" "49sta0130.png"	"1,8292" "49sta0227.png"		"1,2503" "49sta0032.png" "49sta0033.png" "49sta0034.png" "49sta0035.png" "49sta0036.png" "49sta0037.png" "49sta0038.png" "49sta0039.png"	