Вариант - 1  
1. a) 1/66; b) 1/9979200.  
  
2. а) 2/3; б) 8/9.  
  
3. A = (T1 ∧ T2 ∧ T3) ∧ (D1 ∧ D2 ∧ D3 ∧ D4) ∧ (R1 ∨ R2 ∨ R3 ∨ R4 ∨ R5)  
  
4. а) 0.1; б) 0.4 в) 0.4.  
  
5. 0.8821.  
  
6. 0.9655.  
  
7. 0.3667  
  
8. 0.4118.  
  
9. 0.9969.  
  
10. а) 0,007267222761422; б) 0,81590.  
  
11. 0.6832  
  
12. MX = 3.5; DX = 2.9167; σ(X) = 1.7078

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| № | X | 1 | 2 | 3 | 4 | 5 | 6 |
| 12 | P | 0.1667 | 0.1667 | 0.1667 | 0.1667 | 0.1667 | 0.1667 |

Вариант - 2  
1. а) 1/90; б) 1/6.  
  
2. a) (C(12, 4) + C(12, 8)/C(16, 8)); б) C(4, 2)C(12, 6) + C(4, 3)C(12, 5) + C(4, 4)C(12, 4)/C(16, 8)  
  
3. A = {1, 3, 5}; B = {1, 2, 4, 5, 6}; C = {1, 2, 3, 4, 6}
а) {1}; б) {1, 2, 3, 4, 5, 6}; в) {2, 4, 6}.  
  
4. a) 0.85; б) 0.15; в) 0.35  
  
5. 0.304  
  
6. 0,015200  
  
7. 0.4333.  
  
8. 0.2174.  
  
9. 0,000000  
  
10. а) 0,023899329292690; б) 0,81590.  
  
11. 0.2004.  
  
12. Ряд распределения смотреть внизу после ответов. M(X) = 3.3616, D(X) = 2.57, σ(X) = 1.6031.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| № | X | 1 | 2 | 3 | 4 | 5 |
| 12 | P | 0.2 | 0.16 | 0.128 | 0.1024 | 0.4096 |

Вариант - 3  
1. а) 1/132; б) 7/44.  
  
2. a) (C(10, 2) + C(10, 8)/C(16, 8)); б) C(6, 1)C(10, 7) + C(6, 2)C(10, 6) + C(6, 3)C(10, 5) + C(6, 4)C(10, 4) + C(6, 5)C(10, 3) + C(6, 6)C(10, 2)/C(16, 8)  
  
3. A = {1, 3, 5}; B = {1, 2, 4, 5, 6}; C = {1, 2, 3, 4, 6}
а) {1}; б) {1, 2, 3, 4, 5, 6}; в) {2, 4, 6}.  
  
4. а) 0.05; б) 0.45 в) 0.45.  
  
5. 0.174  
  
6. 0.8959.  
  
7. 0.35.  
  
8. 0.4375.  
  
9. 0,000100  
  
10. a)0.0816; b) 0.5987  
  
11. 0.1301.  
  
12. Ряд распределения смотреть внизу после ответов. M(X) = 2.7731, D(X) = 2.4218, σ(X) = 1.5562.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| № | X | 1 | 2 | 3 | 4 | 5 |
| 12 | P | 0.3 | 0.21 | 0.147 | 0.1029 | 0.2401 |