Вариант - 1  
15. а) M(X) = 4.7 + 6p; D(X) = 18.61 -20,400p - 36.0p^2; M(Y) = 1.8; D(Y) = 2.76;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 11.2 + 12.0p; D(Z1) = 77.2 -81,600p - 144.0p^2; M(Z2) = 8.46 + 10.8p; D(Z2) = 172.6284 + 33,264p - 116.64p^2.

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| № | Z1 | 4 | 6 | 14 | 16 | 20 | 22 |
| 15 | P | 0.06 | 0.06 | 0.3p | 0.3p | 0.15 | 0.15 |

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| № | Z2 | 2 | 4 | 12 | 24 | 18 | 36 |
| 15 | P | 0.06 | 0.06 | 0.3p | 0.3p | 0.15 | 0.15 |

Вариант - 2  
15. а) M(X) = 2.5 + 5p; D(X) = 9.25 + 0,000p - 25.0p^2; M(Y) = 2.0; D(Y) = 1.2;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 7.0 + 10.0p; D(Z1) = 38.2 + 0,000p - 100.0p^2; M(Z2) = 5.0 + 10.0p; D(Z2) = 55.6 + 30,000p - 100.0p^2.

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| № | Z1 | 6 | 7 | 12 | 13 | 16 | 17 |
| 15 | P | 0.08 | 0.08 | 0.4p | 0.4p | 0.12 | 0.12 |

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| № | Z2 | 4 | 6 | 10 | 15 | 14 | 21 |
| 15 | P | 0.08 | 0.08 | 0.4p | 0.4p | 0.12 | 0.12 |

Вариант - 3  
15. а) M(X) = 4.3 + 6p; D(X) = 7.61 -15,600p - 36.0p^2; M(Y) = 0.8; D(Y) = 1.36;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 9.4 + 12.0p; D(Z1) = 31.8 -62,400p - 144.0p^2; M(Z2) = 3.44 + 4.8p; D(Z2) = 40.3664 + 38,976p - 23.04p^2.

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| № | Z1 | 5 | 7 | 13 | 15 | 15 | 17 |
| 15 | P | 0.08 | 0.08 | 0.2p | 0.2p | 0.1 | 0.1 |

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| № | Z2 | 2 | 6 | 6 | 18 | 7 | 21 |
| 15 | P | 0.08 | 0.08 | 0.2p | 0.2p | 0.1 | 0.1 |

Вариант - 4  
15. а) M(X) = 3.7 + 6p; D(X) = 11.01 -8,400p - 36.0p^2; M(Y) = 0.6; D(Y) = 1.44;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 8.0 + 12.0p; D(Z1) = 45.48 -33,600p - 144.0p^2; M(Z2) = 2.22 + 3.6p; D(Z2) = 39.5316 + 48,816p - 12.96p^2.

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| № | Z1 | 3 | 6 | 13 | 16 | 15 | 18 |
| 15 | P | 0.04 | 0.02 | 0.2p | 0.1p | 0.1 | 0.05 |

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| № | Z2 | 1 | 4 | 6 | 24 | 7 | 28 |
| 15 | P | 0.04 | 0.02 | 0.2p | 0.1p | 0.1 | 0.05 |

Вариант - 5  
15. а) M(X) = 2.5 + 5p; D(X) = 9.25 + 0,000p - 25.0p^2; M(Y) = 1.6; D(Y) = 3.04;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 6.6 + 10.0p; D(Z1) = 40.04 + 0,000p - 100.0p^2; M(Z2) = 4.0 + 8.0p; D(Z2) = 70.8 + 76,000p - 64.0p^2.

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| № | Z1 | 6 | 8 | 12 | 14 | 16 | 18 |
| 15 | P | 0.04 | 0.06 | 0.2p | 0.3p | 0.06 | 0.09 |

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| № | Z2 | 4 | 8 | 10 | 20 | 14 | 28 |
| 15 | P | 0.04 | 0.06 | 0.2p | 0.3p | 0.06 | 0.09 |

Вариант - 6  
15. а) M(X) = 3.4 + 4p; D(X) = 14.24 -11,200p - 16.0p^2; M(Y) = 1.4; D(Y) = 3.24;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 8.2 + 8.0p; D(Z1) = 60.2 -44,800p - 64.0p^2; M(Z2) = 4.76 + 5.6p; D(Z2) = 111.5024 + 29,888p - 31.36p^2.

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| № | Z1 | 4 | 6 | 10 | 12 | 18 | 20 |
| 15 | P | 0.02 | 0.06 | 0.1p | 0.3p | 0.04 | 0.12 |

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| № | Z2 | 2 | 4 | 8 | 16 | 16 | 32 |
| 15 | P | 0.02 | 0.06 | 0.1p | 0.3p | 0.04 | 0.12 |

Вариант - 7  
15. а) M(X) = 4.4 + 5p; D(X) = 14.64 -19,000p - 25.0p^2; M(Y) = 1.1; D(Y) = 1.29;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 9.9 + 10.0p; D(Z1) = 59.85 -76,000p - 100.0p^2; M(Z2) = 4.84 + 5.5p; D(Z2) = 61.5744 + 9,260p - 30.25p^2.

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| № | Z1 | 6 | 7 | 12 | 13 | 20 | 21 |
| 15 | P | 0.16 | 0.04 | 0.4p | 0.1p | 0.16 | 0.04 |

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| № | Z2 | 4 | 6 | 10 | 15 | 18 | 27 |
| 15 | P | 0.16 | 0.04 | 0.4p | 0.1p | 0.16 | 0.04 |

Вариант - 8  
15. а) M(X) = 4.6 + 6p; D(X) = 19.44 -19,200p - 36.0p^2; M(Y) = 0.6; D(Y) = 1.64;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 9.8 + 12.0p; D(Z1) = 79.4 -76,800p - 144.0p^2; M(Z2) = 2.76 + 3.6p; D(Z2) = 73.5824 + 52,128p - 12.96p^2.

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| № | Z1 | 4 | 6 | 14 | 16 | 20 | 22 |
| 15 | P | 0.01 | 0.01 | 0.1p | 0.1p | 0.05 | 0.05 |

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| № | Z2 | 2 | 4 | 12 | 24 | 18 | 36 |
| 15 | P | 0.01 | 0.01 | 0.1p | 0.1p | 0.05 | 0.05 |

Вариант - 9  
15. а) M(X) = 2.5 + 6p; D(X) = 9.25 + 6,000p - 36.0p^2; M(Y) = 1.0; D(Y) = 1.6;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 6.0 + 12.0p; D(Z1) = 38.6 + 24,000p - 144.0p^2; M(Z2) = 2.5 + 6.0p; D(Z2) = 34.05 + 63,600p - 36.0p^2.

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| № | Z1 | 8 | 9 | 14 | 15 | 18 | 19 |
| 15 | P | 0.06 | 0.06 | 0.2p | 0.2p | 0.04 | 0.04 |

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| № | Z2 | 6 | 9 | 12 | 18 | 16 | 24 |
| 15 | P | 0.06 | 0.06 | 0.2p | 0.2p | 0.04 | 0.04 |

Вариант - 10  
15. а) M(X) = 2.2 + 4p; D(X) = 9.76 -1,600p - 16.0p^2; M(Y) = 1.5; D(Y) = 1.65;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 5.9 + 8.0p; D(Z1) = 40.69 -6,400p - 64.0p^2; M(Z2) = 3.3 + 6.0p; D(Z2) = 46.05 + 22,800p - 36.0p^2.

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| № | Z1 | 8 | 9 | 10 | 11 | 18 | 19 |
| 15 | P | 0.06 | 0.06 | 0.3p | 0.3p | 0.06 | 0.06 |

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| № | Z2 | 6 | 9 | 8 | 12 | 16 | 24 |
| 15 | P | 0.06 | 0.06 | 0.3p | 0.3p | 0.06 | 0.06 |

Вариант - 11  
15. а) M(X) = 3.4 + 5p; D(X) = 9.24 -9,000p - 25.0p^2; M(Y) = 1.8; D(Y) = 1.56;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 8.6 + 10.0p; D(Z1) = 38.52 -36,000p - 100.0p^2; M(Z2) = 6.12 + 9.0p; D(Z2) = 62.3856 + 9,840p - 81.0p^2.

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| № | Z1 | 6 | 7 | 12 | 13 | 16 | 17 |
| 15 | P | 0.09 | 0.12 | 0.3p | 0.4p | 0.12 | 0.16 |

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| № | Z2 | 4 | 6 | 10 | 15 | 14 | 21 |
| 15 | P | 0.09 | 0.12 | 0.3p | 0.4p | 0.12 | 0.16 |

Вариант - 12  
15. а) M(X) = 3.0 + 4p; D(X) = 8.4 -8,000p - 16.0p^2; M(Y) = 2.2; D(Y) = 2.76;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 8.2 + 8.0p; D(Z1) = 36.36 -32,000p - 64.0p^2; M(Z2) = 6.6 + 8.8p; D(Z2) = 88.68 + 5,440p - 77.44p^2.

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| № | Z1 | 8 | 10 | 10 | 12 | 16 | 18 |
| 15 | P | 0.09 | 0.12 | 0.3p | 0.4p | 0.09 | 0.12 |

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| № | Z2 | 6 | 12 | 8 | 16 | 14 | 28 |
| 15 | P | 0.09 | 0.12 | 0.3p | 0.4p | 0.09 | 0.12 |

Вариант - 13  
15. а) M(X) = 2.1 + 5p; D(X) = 8.89 + 4,000p - 25.0p^2; M(Y) = 1.6; D(Y) = 1.44;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 5.8 + 10.0p; D(Z1) = 37.0 + 16,000p - 100.0p^2; M(Z2) = 3.36 + 8.0p; D(Z2) = 41.9104 + 46,240p - 64.0p^2.

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| № | Z1 | 3 | 5 | 11 | 13 | 17 | 19 |
| 15 | P | 0.2 | 0.2 | 0.4p | 0.4p | 0.08 | 0.08 |

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| № | Z2 | 1 | 3 | 5 | 15 | 8 | 24 |
| 15 | P | 0.2 | 0.2 | 0.4p | 0.4p | 0.08 | 0.08 |

Вариант - 14  
15. а) M(X) = 1.7 + 5p; D(X) = 4.01 + 8,000p - 25.0p^2; M(Y) = 0.7; D(Y) = 1.21;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 4.1 + 10.0p; D(Z1) = 17.25 + 32,000p - 100.0p^2; M(Z2) = 1.19 + 3.5p; D(Z2) = 10.3139 + 34,170p - 12.25p^2.

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| № | Z1 | 6 | 7 | 12 | 13 | 16 | 17 |
| 15 | P | 0.1 | 0.05 | 0.2p | 0.1p | 0.02 | 0.01 |

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| № | Z2 | 4 | 6 | 10 | 15 | 14 | 21 |
| 15 | P | 0.1 | 0.05 | 0.2p | 0.1p | 0.02 | 0.01 |

Вариант - 15  
15. а) M(X) = 5.3 + 4p; D(X) = 14.01 -26,400p - 16.0p^2; M(Y) = 2.0; D(Y) = 2.4;
б) таблицы распределения случайных величин смотреть в конце после ответов;
в) M(Z1) = 12.6 + 8.0p; D(Z1) = 58.44 -105,600p - 64.0p^2; M(Z2) = 10.6 + 8.0p; D(Z2) = 157.08 -67,200p - 64.0p^2.

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| № | Z1 | 6 | 8 | 10 | 12 | 20 | 22 |
| 15 | P | 0.16 | 0.12 | 0.4p | 0.3p | 0.2 | 0.15 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| № | Z2 | 4 | 8 | 8 | 16 | 18 | 36 |
| 15 | P | 0.16 | 0.12 | 0.4p | 0.3p | 0.2 | 0.15 |