

Find all solutions (if there are any) to each of the following linear diophantine equations.

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| 1. $1221x + 5476y = 482$ | 26. $551x + 3344y = 1559$ | 51. $7216x + 6204y = 925$ |
| 2. $13818x + 15040y = 12690$ | 27. $2610x + 2415y = 2566$ | 52. $544x + 576y = 33$ |
| 3. $1898x + 1859y = 404$ | 28. $1960x + 4960y = 7120$ | 53. $6806x + 8774y = 1230$ |
| 4. $1166x + 352y = 2948$ | 29. $1776x + 7067y = 3220$ | 54. $4480x + 5500y = 3300$ |
| 5. $2040x + 2368y = 1304$ | 30. $5580x + 13320y = 34020$ | 55. $482x + 956y = 170$ |
| 6. $1944x + 1000y = 680$ | 31. $2005x + 2330y = 540$ | 56. $16268x + 1960y = 3528$ |
| 7. $4964x + 2652y = 3741$ | 32. $1300x + 3978y = 287$ | 57. $6880x + 9056y = 640$ |
| 8. $102x + 670y = 202$ | 33. $1650x + 6325y = 1925$ | 58. $722x + 4313y = 874$ |
| 9. $4797x + 10179y = 5616$ | 34. $1380x + 3220y = 54281$ | 59. $4532x + 1683y = 1947$ |
| 10. $11480x + 7252y = 5376$ | 35. $4459x + 13916y = 2695$ | 60. $984x + 3157y = 6766$ |
| 11. $4838x + 4797y = 943$ | 36. $1184x + 2208y = 1697$ | 61. $5652x + 2616y = 1680$ |
| 12. $2086x + 854y = 2730$ | 37. $6790x + 6216y = 406$ | 62. $8722x + 1568y = 9115$ |
| 13. $4069x + 5720y = 910$ | 38. $3030x + 1020y = 1321$ | 63. $9760x + 6980y = 3800$ |
| 14. $2872x + 2976y = 1112$ | 39. $11187x + 429y = 4719$ | 64. $9408x + 714y = 5208$ |
| 15. $1590x + 1980y = 5250$ | 40. $990x + 750y = 1710$ | 65. $9016x + 10787y = 22701$ |
| 16. $6493x + 18834y = 258$ | 41. $138x + 392y = 45$ | 66. $3204x + 6480y = 5689$ |
| 17. $1974x + 3619y = 2304$ | 42. $7101x + 4266y = 4293$ | 67. $145x + 1470y = 545$ |
| 18. $2023x + 245y = 798$ | 43. $8294x + 10032y = 1342$ | 68. $10276x + 3416y = 2324$ |
| 19. $464x + 1352y = 1337$ | 44. $4165x + 6335y = 1891$ | 69. $2508x + 5304y = 1608$ |
| 20. $6630x + 6528y = 10302$ | 45. $1104x + 2622y = 5796$ | 70. $2016x + 1464y = 3672$ |
| 21. $170x + 55y = 46$ | 46. $160x + 19160y = 480$ | 71. $1743x + 2856y = 2541$ |
| 22. $8364x + 15776y = 8568$ | 47. $4356x + 5112y = 6985$ | 72. $8325x + 8950y = 75$ |
| 23. $2262x + 845y = 1106$ | 48. $16512x + 10148y = 29928$ | 73. $564x + 372y = 37$ |
| 24. $1183x + 175y = 714$ | 49. $2268x + 28y = 1093$ | 74. $7252x + 10286y = 14134$ |
| 25. $154x + 231y = 11165$ | 50. $799x + 5984y = 1632$ | 75. $4070x + 682y = 661$ |