

Find the values of the variable which satisfy the following equations.

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|----------------|--------------------------------|---------------------------------|
| 1 $x - 4 = 5$ | 12 $\frac{x}{2} = 4$ | 21 $\frac{6x}{5} = 12$ |
| 2 $y + 3 = 7$ | 13 $\frac{x}{3} = 6$ | 22 $-9a = -27$ |
| 3 $5x = 35$ | 14 $2a = 7$ | 23 $5y = 4y - 3$ |
| 4 $7a = 21$ | 15 $3t = 10$ | 24 $7x - 10x = 12$ |
| 5 $5x = 30$ | 16 $\frac{x}{6} = \frac{1}{3}$ | 25 $5 - y = 3$ |
| 6 $4a = -20$ | 17 $\frac{2x}{3} = 0$ | 26 $12 - 2y = y$ |
| 7 $17y = 51$ | 18 $6x - 2x = 16$ | 27 $\frac{x}{3} = \frac{1}{12}$ |
| 8 $11x = -44$ | 19 $2a - 5a = 9$ | 28 $a + 2a - 6a = -15$ |
| 9 $5x = 0$ | 20 $10x - 4x = 36 - 12$ | 29 $15m = 10$ |
| 10 $-x = 8$ | | 30 $9x - 18 = 6x$ |
| 11 $-7a = -14$ | | |

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| 31 $8x - 4 = 28$ | 37 $\frac{x}{3} = \frac{x}{4} + 1$ |
| 32 $4x + 7 = 2x + 20$ | 38 $\frac{2a - 3}{5} = 7$ |
| 33 $9y - 5 = 5y + 35$ | 39 $\frac{x - 3}{4} = \frac{x - 2}{5}$ |
| 34 $17a - 35 = 13a - 19$ | 40 $\frac{2t - 1}{4} = 1 + \frac{t - 1}{5}$ |
| 35 $5x + 3 = 2(x + 12)$ | |
| 36 $7(y - 2) = 5(y + 4)$ | |

Solve these equations.

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| 41 $8(x - 4) - 2(x + 1) = 30$ | 46 $\frac{1}{x} + 3 = \frac{4}{x}$ |
| 42 $x(x - 3) = x^2 + 18$ | 47 $3(2t - 7) = 4(t - 1)$ |
| 43 $\frac{x + 2}{3} = 4 - \frac{x}{2}$ | 48 $\frac{x + 2}{2} = 4 - \frac{x - 3}{3}$ |
| 44 $4 = -6 + \frac{9a}{2}$ | 49 $\frac{x + 3}{8} = \frac{3x + 2}{16}$ |
| 45 $12 + 8m - 4 = 0$ | 50 $24y - 3(3y + 4) + 2 = 10(4 - y)$ |

Answers

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|-------------------------|------------------------|------------------------|------------------------|
| 1. $x = 9$ | 2. $y = 4$ | 3. $x = 7$ | 4. $a = 3$ |
| 5. $x = 6$ | 6. $a = -5$ | 7. $y = 3$ | 8. $x = -4$ |
| 9. $x = 0$ | 10. $x = -8$ | 11. $a = 2$ | 12. $x = 8$ |
| 13. $x = 18$ | 14. $a = 3\frac{1}{2}$ | 15. $t = 3\frac{1}{3}$ | 16. $x = 2$ |
| 17. $x = 0$ | 18. $x = 4$ | 19. $a = -3$ | 20. $x = 4$ |
| 21. $x = 10$ | 22. $a = 3$ | 23. $y = -3$ | 24. $x = -4$ |
| 25. $y = 2$ | 26. $y = 4$ | 27. $x = \frac{1}{4}$ | 28. $a = 5$ |
| 29. $m = \frac{2}{3}$ | 30. $x = 6$ | 31. $x = 4$ | 32. $x = 6\frac{1}{2}$ |
| 33. $y = 10$ | 34. $a = 4$ | 35. $x = 7$ | 36. $y = 17$ |
| 37. $x = 12$ | 38. $a = 19$ | 39. $x = 7$ | 40. $t = 3\frac{1}{2}$ |
| 41. $x = 10\frac{2}{3}$ | 42. $x = -6$ | 43. $x = 4$ | 44. $a = 2\frac{2}{3}$ |
| 45. $m = -1$ | 46. $x = 1$ | 47. $t = 8\frac{1}{2}$ | 48. $x = 4\frac{4}{5}$ |
| 49. $x = 4$ | 50. $y = 2$ | | |