



Solve the following equations. Some questions will have negative, fraction or decimal answers.

Section A

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|----------------------------|--|------------------------------|--|
| 1) $4x + 10 = 30$ 5 | 4) $9 + 4x = -15$ -6 | 7) $5 + 10x = -15$ -2 | 10) $-4 = 12 - 2x$ 8 |
| 2) $4x - 8 = 20$ 7 | 5) $14 + 6x = 2$ -2 | 8) $10 = 7 - x$ -3 | 11) $25 = 46 - 3x$ 7 |
| 3) $5 + 2x = 65$ 30 | 6) $2x - 3 = -2$ $\frac{1}{2}$ | 9) $-3 = 16 - x$ 19 | 12) $8 = 9 - 5x$ $\frac{1}{5}$ |

Section B

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|--------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|
| 1) $\frac{x}{2} + 11 = 19$ 16 | 4) $3 = \frac{x}{4} - 3$ 24 | 7) $-1 = 6 + \frac{x}{2}$ -14 | 10) $\frac{x+5}{3} = 12$ 31 |
| 2) $\frac{x}{7} - 6 = 1$ 49 | 5) $7 = \frac{x}{2} - 4$ 22 | 8) $14 - \frac{x}{3} = 10$ 12 | 11) $\frac{x-4}{11} = 9$ 103 |
| 3) $12 + \frac{x}{5} = 20$ 40 | 6) $-2 = \frac{x}{8} - 5$ 24 | 9) $5 - \frac{x}{9} = -1$ 54 | 12) $\frac{x+3}{8} = -2$ -19 |

Section C

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|------------------------------|------------------------------|--|
| 1) $3(x+2) = 15$ 3 | 5) $5(4x-3) = 11$ 1.3 | 9) $2(3x-1)+3 = 21$ $\frac{10}{3}$ |
| 2) $2(x+5) = 24$ 7 | 6) $-3(2x+1) = 21$ -4 | 10) $2(x+1)+3x = 37$ 7 |
| 3) $6(x-9) = 12$ 11 | 7) $-9(x-4) = 54$ -2 | 11) $12+4(2x+4) = 68$ 5 |
| 4) $2(3x+5) = -44$ -9 | 8) $7(x-4)-3 = 46$ 11 | 12) $3x-2(6x-3) = 42$ -4 |

Section D

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|----------------------------|-----------------------------|--|
| 1) $x+8 = 3x$ 4 | 5) $4x+7 = 6x$ 3.5 | 9) $2-4x = 6x$ $\frac{1}{5}$ |
| 2) $6+x = 2x$ 6 | 6) $9x+13 = 7x$ -6.5 | 10) $4(x+3) = 7x$ 4 |
| 3) $10+x = 6x$ 2 | 7) $12x-5 = 7x$ 1 | 11) $5(2x-1) = 16x$ $-\frac{5}{6}$ |
| 4) $3x-24 = 5x$ -12 | 8) $5-2x = 8x$ 0.5 | 12) $3(6x+4) = 2x$ $-\frac{3}{4}$ |

Section E

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|---|----------------------------|---|
| 1) $9x+2 = 4x+12$ 2 | 5) $7+x = 13+4x$ -2 | 9) $4x-21 = 6x-3$ -9 |
| 2) $5x+4 = 31+2x$ 9 | 6) $5x-3 = 2x+6$ 3 | 10) $x-3 = 1+7x$ $-\frac{2}{3}$ |
| 3) $12+3x = 8x+3$ $\frac{9}{5}$ | 7) $5x-6 = 18-3x$ 3 | 11) $9x-5 = 7-4x$ $\frac{12}{13}$ |
| 4) $20+2x = 6+9x$ 2 | 8) $8-2x = 4-6x$ -1 | 12) $-8x+4 = -26x+1$ $-\frac{1}{6}$ |