

# Level I Equations

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$$1.) \ x - 9 = -3$$

$$2.) \ 4x + 8 = -32$$

$$3.) \ 6x + 4 = -2$$

$$4.) \ \frac{x}{4} - 4 = 2$$

$$5.) \ 8 + \frac{x}{5} = 19$$

$$6.) \ -3 + 4x = 9$$

$$7.) \ 2x + 6 = 6$$

$$8.) \ -9 + x = -2$$

$$9.) \ 7 + x = 5$$

$$10.) \ -3x = -12$$

$$11.) \ 2x - 5 = 11$$

$$12.) \ -2x - 10 = 2$$

# Level I ANSWERS

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$$1.) \ x - 9 = -3$$

ANSWER:  $x = 6$

$$2.) \ 4x + 8 = -32$$

ANSWER:  $x = -10$

$$3.) \ 6x + 4 = -2$$

ANSWER:  $x = -1$

$$4.) \ \frac{x}{4} - 4 = 2$$

ANSWER:  $x = 24$

$$5.) \ 8 + \frac{x}{5} = 19$$

ANSWER:  $x = 55$

$$6.) \ -3 + 4x = 9$$

ANSWER:  $x = 3$

$$7.) \ 2x + 6 = 6$$

ANSWER:  $x = 0$

$$8.) \ -9 + x = -2$$

ANSWER:  $x = 7$

$$9.) \ 7 + x = 5$$

ANSWER:  $x = -2$

$$10.) \ -3x = -12$$

ANSWER:  $x = 4$

$$11.) \ 2x - 5 = 11$$

ANSWER:  $x = 8$

$$12.) \ -2x - 10 = 2$$

ANSWER:  $x = -6$

# Level 2 Equations

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$$1.) \quad -37 = 5x + 3x + 3$$

$$2.) \quad 4x + 7 + 2x = 67$$

$$3.) \quad -4 - 6x - 5x = 40$$

$$4.) \quad -106 = 7x + x - 10$$

$$5.) \quad 44 = 7x + 5x + 8$$

$$6.) \quad 3x + 5 + 3x = 77$$

$$7.) \quad 2x + 7 = -5x + 7$$

$$8.) \quad -3x + 5 = -83 + 5x$$

$$9.) \quad -3x + 8 = x + 12$$

$$10.) \quad 7x + 9 = 54 + 2x$$

$$11.) \quad 5x + 10 = 3x + 24$$

$$12.) \quad 1 - x = -7x - 47$$

# Level 2 ANSWERS

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$$1.) -37 = 5x + 3x + 3$$

ANSWER:  $x = -5$

$$2.) 4x + 7 + 2x = 67$$

ANSWER:  $x = 10$

$$3.) -4 - 6x - 5x = 40$$

ANSWER:  $x = -4$

$$4.) -106 = 7x + x - 10$$

ANSWER:  $x = -12$

$$5.) 44 = 7x + 5x + 8$$

ANSWER:  $x = 3$

$$6.) 3x + 5 + 3x = 77$$

ANSWER:  $x = 12$

$$7.) 2x + 7 = -5x + 7$$

ANSWER:  $x = 0$

$$8.) -3x + 5 = -83 + 5x$$

ANSWER:  $x = 11$

$$9.) -3x + 8 = x + 12$$

ANSWER:  $x = -1$

$$10.) 7x + 9 = 54 + 2x$$

ANSWER:  $x = 9$

$$11.) 5x + 10 = 3x + 24$$

ANSWER:  $x = 7$

$$12.) 1 - x = -7x - 47$$

ANSWER:  $x = -8$

# Level 3 Equations

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$$1.) -7x - 1 = 7x + 97$$

$$2.) 3x - 9 = -7x + 91$$

$$3.) 5x + 9 = -3x + 97$$

$$4.) 2x + 10 = 2x + 5 + x$$

$$5.) 6x + 7 = 20 - 7x$$

$$6.) 6x - 8 = 3x - 41$$

$$7.) 2(3x + 8) = 34$$

$$8.) -4(1x + 3) = -48$$

$$9.) 3(6x + 3) = 5x + 7 + 3x + 82$$

$$10.) 6(2 + x) = 2(x + 10)$$

$$11.) x + 4 + 3x - 6 = 2x + 13 + 3x - 2 \quad 12.) 5x - 14 = 12x - 7$$

# Level 3 ANSWERS

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$$1.) -7x - 1 = 7x + 97$$

ANSWER:  $x = -7$

$$2.) 3x - 9 = -7x + 91$$

ANSWER:  $x = 10$

$$3.) 5x + 9 = -3x + 97$$

ANSWER:  $x = 11$

$$4.) 2x + 10 = 2x + 5 + x$$

ANSWER:  $x = 5$

$$5.) 6x + 7 = 20 - 7x$$

ANSWER:  $x = 1$

$$6.) 6x - 8 = 3x - 41$$

ANSWER:  $x = -11$

$$7.) 2(3x + 8) = 34$$

ANSWER:  $x = 3$

$$8.) -4(1x + 3) = -48$$

ANSWER:  $x = 9$

$$9.) 3(6x + 3) = 5x + 7 + 3x + 82$$

ANSWER:  $x = 8$

$$10.) 6(2 + x) = 2(x + 10)$$

ANSWER:  $x = 2$

$$11.) x + 4 + 3x - 6 = 2x + 13 + 3x - 2 \quad 12.) 5x - 14 = 12x - 7$$

ANSWER:  $x = -13$

ANSWER:  $x = -1$