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JPMethod Polynomials

Algebraic Expressions

Polynomials & Quadratic Equations

!!! Optimized for double sided, flip on the short side printing
of four A5 sheets on one A4 paper. !!!

Algebraic Expressions

This workbook teaches polynomial manipulation and quadratic equation solving through progressive exercises.

- Start with polynomial multiplication
- Learn multiplication using algebraic formulas
- Master factorisation techniques
- Work with square roots and quadratic equations
- Explore graphs of quadratic functions
- Apply the Pythagorean theorem

Regular practice with polynomials builds strong algebraic foundations.

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Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $5(2x + 2) =$

(2) $2(3y - 4b) =$

(3) $4(2a + 2) =$

(4) $2(3a - 1) =$

(5) $5(2x + 5) =$

(6) $2(x - 1b) =$

Guide for Parents and Tutors

This JPMethod Polynomials workbook provides structured practice for Algebraic Expressions.

How to Use This Workbook

- Work through sections in order
- Complete practice problems before checking solutions
- Review mistakes to improve understanding
- Practice regularly for best results

Understanding Polynomial Operations

This workbook covers fundamental polynomial operations including multiplication, factoring, and solving quadratic equations. Each section builds on previous concepts.

Common Challenges

- Students may confuse distribution with simple multiplication
- Sign errors are common when working with negative terms
- Factoring requires pattern recognition skills
- Quadratic formula needs careful substitution

Support Strategies

Encourage students to show all work and check answers by substitution. Visual aids and graph paper can help with understanding polynomial behavior.

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $2(a+3b) =$

(2) $5(4x+7) =$

(3) $2(4x-3) =$

(4) $4(2y+1) =$

(5) $4(3a+1x) =$

(6) $5(a+2y) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $4a + 4(-1a + 4b) =$

(2) $2y + 3(-1y + 2b) =$

(3) $2y + 3(-3y + 2x) =$

(4) $3(b + 1) + 4(b + 3) =$

(5) $4(a + 1) + 2(a - 1) =$

(6) $4(a + 2) + 3(a + 5) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $4(b-2) =$

(2) $-2(x+1a) =$

(3) $3(2y+1) =$

(4) $3(a+6) =$

(5) $5(2x+3y) =$

(6) $4(y-4) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $2(b+2x) =$

(2) $-2(x+1y) =$

(3) $-4(3a-4b) =$

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(5) $5(a-6) =$

(6) $5(y+4) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $4(x - 3a) =$

(2) $2(3b + 8) =$

(3) $4(4b + 4) =$

(4) $4(2a + 4) =$

(5) $3(3a + 2) =$

(6) $4(y - 3a) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $5a + 3(2a + 1b) =$

(2) $3y + 3(3y + 1a) =$

(3) $5(x + 1) + 2(x - 4) =$

(4) $4y + 3(3y + 4x) =$

(5) $5(x + 1) + 4(x + 1) =$

(6) $3(a + 4) + 4(a + 5) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $4x + 4(4x + 1y) =$

(2) $4(x + 2) + 3(x - 5) =$

(3) $4(y + 3) + 3(y - 5) =$

(4) $2(y + 4) + 4(y + 1) =$

(5) $4(a + 4) + 4(a + 4) =$

(6) $3(x + 1) + 4(x - 1) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $4(b+2)+4(b+2)=$

(2) $3a+4(4a+1y)=$

(3) $4y+3(-1y+2x)=$

(4) $4(x+4)+4(x-4)=$

(5) $4(x+4)+2(x-2)=$

(6) $2a+2(3a+3y)=$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $3(y+2)+2(y+3)=$

(2) $5(a+4)+4(a+3)=$

(3) $4(a+4)+3(a+1)=$

(4) $2(x+3)+2(x+2)=$

(5) $4y+3(-1y+1a)=$

(6) $3(b+4)+2(b-5)=$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $(y+3)(y-3) =$

(2) $(x+5)^2 =$

(3) $(y-2)^2 =$

(4) $(y+4)(y-4) =$

(5) $(x+3)(x-3) =$

(6) $(x+2)(x-2) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $(a+3)(a-3) =$

(2) $(y+4)^2 =$

(3) $(x-4)^2 =$

(4) $(x-3)^2 =$

(5) $(a+4)(a-4) =$

(6) $(a-7)^2 =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $(a+3)(a-3) =$

(2) $(a+6)^2 =$

(3) $(x+8)^2 =$

(4) $(a+7)^2 =$

(5) $(a-6)^2 =$

(6) $(y-2)^2 =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $(y+6)^2 =$

(2) $(a+4)^2 =$

(3) $(y+7)(y-7) =$

(4) $(y-2)^2 =$

(5) $(x-4)^2 =$

(6) $(a-6)^2 =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $3y(4y - 4a) =$

(2) $3x(2x + 4) =$

(3) $(x + 4)(x + 6) =$

(4) $2y(1y + 3) =$

(5) $(a - 2)(a + 5) =$

(6) $(y + 6)(y + 3) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $(a-6)^2 =$

(2) $(x+3)^2 =$

(3) $(x+6)^2 =$

(4) $(y+8)^2 =$

(5) $(x+8)(x-8) =$

(6) $(a-5)^2 =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $(y+6)(y+6) =$

(2) $4b(3b-4) =$

(3) $(x-4)(x+2) =$

(4) $4b(1b+1) =$

(5) $3a(2a+6) =$

(6) $3y(1y-3x) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $3b(3b + 6x) =$

(2) $5b(3b - 2y) =$

(3) $4x(1x - 3) =$

(4) $2x(3x + 3b) =$

(5) $(x + 3)(x - 5) =$

(6) $4x(2x - 3a) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $5(2x + 2) =$

(2) $2(3y - 4b) =$

(3) $4(2a + 2) =$

(4) $2(3a - 1) =$

(5) $5(2x + 5) =$

(6) $2(x - 1b) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $4y(3y + 6) =$

(2) $4b(2b + 3y) =$

(3) $(y - 3)(y + 1) =$

(4) $4b(3b - 4y) =$

(5) $(y - 6)(y - 5) =$

(6) $2y(3y + 4x) =$

Section 1. Multiplication of Polynomials

Multiply the polynomials and simplify your answer.

(1) $(y-1)(y-2) =$

(2) $(a+2)(a+5) =$

(3) $3a(1a-1) =$

(4) $3a(2a+6) =$

(5) $5x(3x-3) =$

(6) $(a-3)(a+5) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $2(a+3b) =$

(2) $5(4x+7) =$

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(1) $4a + 4(-1a + 4b) =$

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(4) $3(b + 1) + 4(b + 3) =$

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(6) $4(a + 2) + 3(a + 5) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $4(b-2) =$

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(5) $5(2x+3y) =$

(6) $4(y-4) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $2(b+2x) =$

(2) $-2(x+1y) =$

(3) $-4(3a-4b) =$

(4) $-5(x-1a) =$

(5) $5(a-6) =$

(6) $5(y+4) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $4(x - 3a) =$

(2) $2(3b + 8) =$

(3) $4(4b + 4) =$

(4) $4(2a + 4) =$

(5) $3(3a + 2) =$

(6) $4(y - 3a) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $5a + 3(2a + 1b) =$

(2) $3y + 3(3y + 1a) =$

(3) $5(x + 1) + 2(x - 4) =$

(4) $4y + 3(3y + 4x) =$

(5) $5(x + 1) + 4(x + 1) =$

(6) $3(a + 4) + 4(a + 5) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $4x + 4(4x + 1y) =$

(2) $4(x + 2) + 3(x - 5) =$

(3) $4(y + 3) + 3(y - 5) =$

(4) $2(y + 4) + 4(y + 1) =$

(5) $4(a + 4) + 4(a + 4) =$

(6) $3(x + 1) + 4(x - 1) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $4(b+2)+4(b+2)=$

(2) $3a+4(4a+1y)=$

(3) $4y+3(-1y+2x)=$

(4) $4(x+4)+4(x-4)=$

(5) $4(x+4)+2(x-2)=$

(6) $2a+2(3a+3y)=$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $3(y+2)+2(y+3)=$

(2) $5(a+4)+4(a+3)=$

(3) $4(a+4)+3(a+1)=$

(4) $2(x+3)+2(x+2)=$

(5) $4y+3(-1y+1a)=$

(6) $3(b+4)+2(b-5)=$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $(y+3)(y-3) =$

(2) $(x+5)^2 =$

(3) $(y-2)^2 =$

(4) $(y+4)(y-4) =$

(5) $(x+3)(x-3) =$

(6) $(x+2)(x-2) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $(a+3)(a-3) =$

(2) $(y+4)^2 =$

(3) $(x-4)^2 =$

(4) $(x-3)^2 =$

(5) $(a+4)(a-4) =$

(6) $(a-7)^2 =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $(a+3)(a-3) =$

(2) $(a+6)^2 =$

(3) $(x+8)^2 =$

(4) $(a+7)^2 =$

(5) $(a-6)^2 =$

(6) $(y-2)^2 =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $(y+6)^2 =$

(2) $(a+4)^2 =$

(3) $(y+7)(y-7) =$

(4) $(y-2)^2 =$

(5) $(x-4)^2 =$

(6) $(a-6)^2 =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $3y(4y - 4a) =$

(2) $3x(2x + 4) =$

(3) $(x + 4)(x + 6) =$

(4) $2y(1y + 3) =$

(5) $(a - 2)(a + 5) =$

(6) $(y + 6)(y + 3) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $(a-6)^2 =$

(2) $(x+3)^2 =$

(3) $(x+6)^2 =$

(4) $(y+8)^2 =$

(5) $(x+8)(x-8) =$

(6) $(a-5)^2 =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $(y+6)(y+6) =$

(2) $4b(3b-4) =$

(3) $(x-4)(x+2) =$

(4) $4b(1b+1) =$

(5) $3a(2a+6) =$

(6) $3y(1y-3x) =$

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Use algebraic formulas to expand and simplify.

(1) $3b(3b + 6x) =$

(2) $5b(3b - 2y) =$

(3) $4x(1x - 3) =$

(4) $2x(3x + 3b) =$

(5) $(x + 3)(x - 5) =$

(6) $4x(2x - 3a) =$

Section 3. Factorisation

Factor each expression completely.

(1) $5(2x + 2) =$

(2) $2(3y - 4b) =$

(3) $4(2a + 2) =$

(4) $2(3a - 1) =$

(5) $5(2x + 5) =$

(6) $2(x - 1b) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $4y(3y + 6) =$

(2) $4b(2b + 3y) =$

(3) $(y - 3)(y + 1) =$

(4) $4b(3b - 4y) =$

(5) $(y - 6)(y - 5) =$

(6) $2y(3y + 4x) =$

Section 2. Multiplication Using Formulas

Use algebraic formulas to expand and simplify.

(1) $(y-1)(y-2) =$

(2) $(a+2)(a+5) =$

(3) $3a(1a-1) =$

(4) $3a(2a+6) =$

(5) $5x(3x-3) =$

(6) $(a-3)(a+5) =$

Section 3. Factorisation

Factor each expression completely.

(1) $2(a+3b) =$

(2) $5(4x+7) =$

(3) $2(4x-3) =$

(4) $4(2y+1) =$

(5) $4(3a+1x) =$

(6) $5(a+2y) =$

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Factor each expression completely.

(1) $4a + 4(-1a + 4b) =$

(2) $2y + 3(-1y + 2b) =$

(3) $2y + 3(-3y + 2x) =$

(4) $3(b + 1) + 4(b + 3) =$

(5) $4(a + 1) + 2(a - 1) =$

(6) $4(a + 2) + 3(a + 5) =$

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Factor each expression completely.

(1) $4(b-2) =$

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(3) $3(2y+1) =$

(4) $3(a+6) =$

(5) $5(2x+3y) =$

(6) $4(y-4) =$

Section 3. Factorisation

Factor each expression completely.

(1) $2(b+2x) =$

(2) $-2(x+1y) =$

(3) $-4(3a-4b) =$

(4) $-5(x-1a) =$

(5) $5(a-6) =$

(6) $5(y+4) =$

Section 3. Factorisation

Factor each expression completely.

(1) $4(x - 3a) =$

(2) $2(3b + 8) =$

(3) $4(4b + 4) =$

(4) $4(2a + 4) =$

(5) $3(3a + 2) =$

(6) $4(y - 3a) =$

Section 3. Factorisation

Factor each expression completely.

(1) $5a + 3(2a + 1b) =$

(2) $3y + 3(3y + 1a) =$

(3) $5(x + 1) + 2(x - 4) =$

(4) $4y + 3(3y + 4x) =$

(5) $5(x + 1) + 4(x + 1) =$

(6) $3(a + 4) + 4(a + 5) =$

Section 3. Factorisation

Factor each expression completely.

(1) $4x + 4(4x + 1y) =$

(2) $4(x + 2) + 3(x - 5) =$

(3) $4(y + 3) + 3(y - 5) =$

(4) $2(y + 4) + 4(y + 1) =$

(5) $4(a + 4) + 4(a + 4) =$

(6) $3(x + 1) + 4(x - 1) =$

Section 3. Factorisation

Factor each expression completely.

(1) $4(b+2)+4(b+2)=$

(2) $3a+4(4a+1y)=$

(3) $4y+3(-1y+2x)=$

(4) $4(x+4)+4(x-4)=$

(5) $4(x+4)+2(x-2)=$

(6) $2a+2(3a+3y)=$

Section 3. Factorisation

Factor each expression completely.

(1) $3(y+2)+2(y+3)=$

(2) $5(a+4)+4(a+3)=$

(3) $4(a+4)+3(a+1)=$

(4) $2(x+3)+2(x+2)=$

(5) $4y+3(-1y+1a)=$

(6) $3(b+4)+2(b-5)=$

Section 3. Factorisation

Factor each expression completely.

(1) $(y+3)(y-3) =$

(2) $(x+5)^2 =$

(3) $(y-2)^2 =$

(4) $(y+4)(y-4) =$

(5) $(x+3)(x-3) =$

(6) $(x+2)(x-2) =$

Section 3. Factorisation

Factor each expression completely.

(1) $(a+3)(a-3) =$

(2) $(y+4)^2 =$

(3) $(x-4)^2 =$

(4) $(x-3)^2 =$

(5) $(a+4)(a-4) =$

(6) $(a-7)^2 =$

Section 3. Factorisation

Factor each expression completely.

(1) $(a+3)(a-3) =$

(2) $(a+6)^2 =$

(3) $(x+8)^2 =$

(4) $(a+7)^2 =$

(5) $(a-6)^2 =$

(6) $(y-2)^2 =$

Section 3. Factorisation

Factor each expression completely.

(1) $(y+6)^2 =$

(2) $(a+4)^2 =$

(3) $(y+7)(y-7) =$

(4) $(y-2)^2 =$

(5) $(x-4)^2 =$

(6) $(a-6)^2 =$

Section 3. Factorisation

Factor each expression completely.

(1) $3y(4y - 4a) =$

(2) $3x(2x + 4) =$

(3) $(x + 4)(x + 6) =$

(4) $2y(1y + 3) =$

(5) $(a - 2)(a + 5) =$

(6) $(y + 6)(y + 3) =$

Section 3. Factorisation

Factor each expression completely.

(1) $(a-6)^2 =$

(2) $(x+3)^2 =$

(3) $(x+6)^2 =$

(4) $(y+8)^2 =$

(5) $(x+8)(x-8) =$

(6) $(a-5)^2 =$

Section 3. Factorisation

Factor each expression completely.

(1) $(y+6)(y+6) =$

(2) $4b(3b-4) =$

(3) $(x-4)(x+2) =$

(4) $4b(1b+1) =$

(5) $3a(2a+6) =$

(6) $3y(1y-3x) =$

Section 3. Factorisation

Factor each expression completely.

(1) $3b(3b + 6x) =$

(2) $5b(3b - 2y) =$

(3) $4x(1x - 3) =$

(4) $2x(3x + 3b) =$

(5) $(x + 3)(x - 5) =$

(6) $4x(2x - 3a) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $5(2x + 2) =$

(2) $2(3y - 4b) =$

(3) $4(2a + 2) =$

(4) $2(3a - 1) =$

(5) $5(2x + 5) =$

(6) $2(x - 1b) =$

Section 3. Factorisation

Factor each expression completely.

(1) $4y(3y + 6) =$

(2) $4b(2b + 3y) =$

(3) $(y - 3)(y + 1) =$

(4) $4b(3b - 4y) =$

(5) $(y - 6)(y - 5) =$

(6) $2y(3y + 4x) =$

Section 3. Factorisation

Factor each expression completely.

(1) $(y-1)(y-2) =$

(2) $(a+2)(a+5) =$

(3) $3a(1a-1) =$

(4) $3a(2a+6) =$

(5) $5x(3x-3) =$

(6) $(a-3)(a+5) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $2(a + 3b) =$

(2) $5(4x + 7) =$

(3) $2(4x - 3) =$

(4) $4(2y + 1) =$

(5) $4(3a + 1x) =$

(6) $5(a + 2y) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $4a + 4(-1a + 4b) =$

(2) $2y + 3(-1y + 2b) =$

(3) $2y + 3(-3y + 2x) =$

(4) $3(b + 1) + 4(b + 3) =$

(5) $4(a + 1) + 2(a - 1) =$

(6) $4(a + 2) + 3(a + 5) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $4(b-2) =$

(2) $-2(x+1a) =$

(3) $3(2y+1) =$

(4) $3(a+6) =$

(5) $5(2x+3y) =$

(6) $4(y-4) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $2(b + 2x) =$

(2) $-2(x + 1y) =$

(3) $-4(3a - 4b) =$

(4) $-5(x - 1a) =$

(5) $5(a - 6) =$

(6) $5(y + 4) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $4(x - 3a) =$

(2) $2(3b + 8) =$

(3) $4(4b + 4) =$

(4) $4(2a + 4) =$

(5) $3(3a + 2) =$

(6) $4(y - 3a) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $5a + 3(2a + 1b) =$

(2) $3y + 3(3y + 1a) =$

(3) $5(x + 1) + 2(x - 4) =$

(4) $4y + 3(3y + 4x) =$

(5) $5(x + 1) + 4(x + 1) =$

(6) $3(a + 4) + 4(a + 5) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $4x + 4(4x + 1y) =$

(2) $4(x + 2) + 3(x - 5) =$

(3) $4(y + 3) + 3(y - 5) =$

(4) $2(y + 4) + 4(y + 1) =$

(5) $4(a + 4) + 4(a + 4) =$

(6) $3(x + 1) + 4(x - 1) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $4(b+2)+4(b+2)=$

(2) $3a+4(4a+1y)=$

(3) $4y+3(-1y+2x)=$

(4) $4(x+4)+4(x-4)=$

(5) $4(x+4)+2(x-2)=$

(6) $2a+2(3a+3y)=$

Section 4. Square Roots

Simplify the square root expressions.

(1) $3(y+2)+2(y+3)=$

(2) $5(a+4)+4(a+3)=$

(3) $4(a+4)+3(a+1)=$

(4) $2(x+3)+2(x+2)=$

(5) $4y+3(-1y+1a)=$

(6) $3(b+4)+2(b-5)=$

Section 4. Square Roots

Simplify the square root expressions.

(1) $(y+3)(y-3) =$

(2) $(x+5)^2 =$

(3) $(y-2)^2 =$

(4) $(y+4)(y-4) =$

(5) $(x+3)(x-3) =$

(6) $(x+2)(x-2) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $(a+3)(a-3) =$

(2) $(y+4)^2 =$

(3) $(x-4)^2 =$

(4) $(x-3)^2 =$

(5) $(a+4)(a-4) =$

(6) $(a-7)^2 =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $(a+3)(a-3) =$

(2) $(a+6)^2 =$

(3) $(x+8)^2 =$

(4) $(a+7)^2 =$

(5) $(a-6)^2 =$

(6) $(y-2)^2 =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $(y+6)^2 =$

(2) $(a+4)^2 =$

(3) $(y+7)(y-7) =$

(4) $(y-2)^2 =$

(5) $(x-4)^2 =$

(6) $(a-6)^2 =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $3y(4y - 4a) =$

(2) $3x(2x + 4) =$

(3) $(x + 4)(x + 6) =$

(4) $2y(1y + 3) =$

(5) $(a - 2)(a + 5) =$

(6) $(y + 6)(y + 3) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $(a-6)^2 =$

(2) $(x+3)^2 =$

(3) $(x+6)^2 =$

(4) $(y+8)^2 =$

(5) $(x+8)(x-8) =$

(6) $(a-5)^2 =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $(y+6)(y+6) =$

(2) $4b(3b-4) =$

(3) $(x-4)(x+2) =$

(4) $4b(1b+1) =$

(5) $3a(2a+6) =$

(6) $3y(1y-3x) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $3b(3b + 6x) =$

(2) $5b(3b - 2y) =$

(3) $4x(1x - 3) =$

(4) $2x(3x + 3b) =$

(5) $(x + 3)(x - 5) =$

(6) $4x(2x - 3a) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $5(2x + 2) =$

(2) $2(3y - 4b) =$

(3) $4(2a + 2) =$

(4) $2(3a - 1) =$

(5) $5(2x + 5) =$

(6) $2(x - 1b) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $4y(3y + 6) =$

(2) $4b(2b + 3y) =$

(3) $(y - 3)(y + 1) =$

(4) $4b(3b - 4y) =$

(5) $(y - 6)(y - 5) =$

(6) $2y(3y + 4x) =$

Section 4. Square Roots

Simplify the square root expressions.

(1) $(y-1)(y-2) =$

(2) $(a+2)(a+5) =$

(3) $3a(1a-1) =$

(4) $3a(2a+6) =$

(5) $5x(3x-3) =$

(6) $(a-3)(a+5) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $2(a + 3b) =$

(2) $5(4x + 7) =$

(3) $2(4x - 3) =$

(4) $4(2y + 1) =$

(5) $4(3a + 1x) =$

(6) $5(a + 2y) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $4a + 4(-1a + 4b) =$

(2) $2y + 3(-1y + 2b) =$

(3) $2y + 3(-3y + 2x) =$

(4) $3(b + 1) + 4(b + 3) =$

(5) $4(a + 1) + 2(a - 1) =$

(6) $4(a + 2) + 3(a + 5) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $4(b-2)=$

(2) $-2(x+1a)=$

(3) $3(2y+1)=$

(4) $3(a+6)=$

(5) $5(2x+3y)=$

(6) $4(y-4)=$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $2(b + 2x) =$

(2) $-2(x + 1y) =$

(3) $-4(3a - 4b) =$

(4) $-5(x - 1a) =$

(5) $5(a - 6) =$

(6) $5(y + 4) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $4(x - 3a) =$

(2) $2(3b + 8) =$

(3) $4(4b + 4) =$

(4) $4(2a + 4) =$

(5) $3(3a + 2) =$

(6) $4(y - 3a) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $5a + 3(2a + 1b) =$

(2) $3y + 3(3y + 1a) =$

(3) $5(x + 1) + 2(x - 4) =$

(4) $4y + 3(3y + 4x) =$

(5) $5(x + 1) + 4(x + 1) =$

(6) $3(a + 4) + 4(a + 5) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $4x + 4(4x + 1y) =$

(2) $4(x + 2) + 3(x - 5) =$

(3) $4(y + 3) + 3(y - 5) =$

(4) $2(y + 4) + 4(y + 1) =$

(5) $4(a + 4) + 4(a + 4) =$

(6) $3(x + 1) + 4(x - 1) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $4(b+2)+4(b+2)=$

(2) $3a+4(4a+1y)=$

(3) $4y+3(-1y+2x)=$

(4) $4(x+4)+4(x-4)=$

(5) $4(x+4)+2(x-2)=$

(6) $2a+2(3a+3y)=$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $3(y+2)+2(y+3)=$

(2) $5(a+4)+4(a+3)=$

(3) $4(a+4)+3(a+1)=$

(4) $2(x+3)+2(x+2)=$

(5) $4y+3(-1y+1a)=$

(6) $3(b+4)+2(b-5)=$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $(y+3)(y-3) =$

(2) $(x+5)^2 =$

(3) $(y-2)^2 =$

(4) $(y+4)(y-4) =$

(5) $(x+3)(x-3) =$

(6) $(x+2)(x-2) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $(a+3)(a-3) =$

(2) $(y+4)^2 =$

(3) $(x-4)^2 =$

(4) $(x-3)^2 =$

(5) $(a+4)(a-4) =$

(6) $(a-7)^2 =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $(a+3)(a-3) =$

(2) $(a+6)^2 =$

(3) $(x+8)^2 =$

(4) $(a+7)^2 =$

(5) $(a-6)^2 =$

(6) $(y-2)^2 =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $(y+6)^2 =$

(2) $(a+4)^2 =$

(3) $(y+7)(y-7) =$

(4) $(y-2)^2 =$

(5) $(x-4)^2 =$

(6) $(a-6)^2 =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $3y(4y - 4a) =$

(2) $3x(2x + 4) =$

(3) $(x + 4)(x + 6) =$

(4) $2y(1y + 3) =$

(5) $(a - 2)(a + 5) =$

(6) $(y + 6)(y + 3) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $(a-6)^2 =$

(2) $(x+3)^2 =$

(3) $(x+6)^2 =$

(4) $(y+8)^2 =$

(5) $(x+8)(x-8) =$

(6) $(a-5)^2 =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $(y + 6)(y + 6) =$

(2) $4b(3b - 4) =$

(3) $(x - 4)(x + 2) =$

(4) $4b(1b + 1) =$

(5) $3a(2a + 6) =$

(6) $3y(1y - 3x) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $3b(3b + 6x) =$

(2) $5b(3b - 2y) =$

(3) $4x(1x - 3) =$

(4) $2x(3x + 3b) =$

(5) $(x + 3)(x - 5) =$

(6) $4x(2x - 3a) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $5(2x + 2) =$

(2) $2(3y - 4b) =$

(3) $4(2a + 2) =$

(4) $2(3a - 1) =$

(5) $5(2x + 5) =$

(6) $2(x - 1b) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $4y(3y + 6) =$

(2) $4b(2b + 3y) =$

(3) $(y - 3)(y + 1) =$

(4) $4b(3b - 4y) =$

(5) $(y - 6)(y - 5) =$

(6) $2y(3y + 4x) =$

Section 5. Quadratic Equations

Solve each quadratic equation.

(1) $(y-1)(y-2) =$

(2) $(a+2)(a+5) =$

(3) $3a(1a-1) =$

(4) $3a(2a+6) =$

(5) $5x(3x-3) =$

(6) $(a-3)(a+5) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $2(a+3b) =$

(2) $5(4x+7) =$

(3) $2(4x-3) =$

(4) $4(2y+1) =$

(5) $4(3a+1x) =$

(6) $5(a+2y) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $4a + 4(-1a + 4b) =$

(2) $2y + 3(-1y + 2b) =$

(3) $2y + 3(-3y + 2x) =$

(4) $3(b + 1) + 4(b + 3) =$

(5) $4(a + 1) + 2(a - 1) =$

(6) $4(a + 2) + 3(a + 5) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $4(b-2) =$

(2) $-2(x+1a) =$

(3) $3(2y+1) =$

(4) $3(a+6) =$

(5) $5(2x+3y) =$

(6) $4(y-4) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $2(b + 2x) =$

(2) $-2(x + 1y) =$

(3) $-4(3a - 4b) =$

(4) $-5(x - 1a) =$

(5) $5(a - 6) =$

(6) $5(y + 4) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $4(x - 3a) =$

(2) $2(3b + 8) =$

(3) $4(4b + 4) =$

(4) $4(2a + 4) =$

(5) $3(3a + 2) =$

(6) $4(y - 3a) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $5a + 3(2a + 1b) =$

(2) $3y + 3(3y + 1a) =$

(3) $5(x + 1) + 2(x - 4) =$

(4) $4y + 3(3y + 4x) =$

(5) $5(x + 1) + 4(x + 1) =$

(6) $3(a + 4) + 4(a + 5) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $4x + 4(4x + 1y) =$

(2) $4(x + 2) + 3(x - 5) =$

(3) $4(y + 3) + 3(y - 5) =$

(4) $2(y + 4) + 4(y + 1) =$

(5) $4(a + 4) + 4(a + 4) =$

(6) $3(x + 1) + 4(x - 1) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $4(b+2)+4(b+2)=$

(2) $3a+4(4a+1y)=$

(3) $4y+3(-1y+2x)=$

(4) $4(x+4)+4(x-4)=$

(5) $4(x+4)+2(x-2)=$

(6) $2a+2(3a+3y)=$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $3(y+2)+2(y+3)=$

(2) $5(a+4)+4(a+3)=$

(3) $4(a+4)+3(a+1)=$

(4) $2(x+3)+2(x+2)=$

(5) $4y+3(-1y+1a)=$

(6) $3(b+4)+2(b-5)=$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $(y+3)(y-3) =$

(2) $(x+5)^2 =$

(3) $(y-2)^2 =$

(4) $(y+4)(y-4) =$

(5) $(x+3)(x-3) =$

(6) $(x+2)(x-2) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $(a+3)(a-3) =$

(2) $(y+4)^2 =$

(3) $(x-4)^2 =$

(4) $(x-3)^2 =$

(5) $(a+4)(a-4) =$

(6) $(a-7)^2 =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $(a+3)(a-3) =$

(2) $(a+6)^2 =$

(3) $(x+8)^2 =$

(4) $(a+7)^2 =$

(5) $(a-6)^2 =$

(6) $(y-2)^2 =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $(y+6)^2 =$

(2) $(a+4)^2 =$

(3) $(y+7)(y-7) =$

(4) $(y-2)^2 =$

(5) $(x-4)^2 =$

(6) $(a-6)^2 =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $3y(4y - 4a) =$

(2) $3x(2x + 4) =$

(3) $(x + 4)(x + 6) =$

(4) $2y(1y + 3) =$

(5) $(a - 2)(a + 5) =$

(6) $(y + 6)(y + 3) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $(a-6)^2 =$

(2) $(x+3)^2 =$

(3) $(x+6)^2 =$

(4) $(y+8)^2 =$

(5) $(x+8)(x-8) =$

(6) $(a-5)^2 =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $(y+6)(y+6) =$

(2) $4b(3b-4) =$

(3) $(x-4)(x+2) =$

(4) $4b(1b+1) =$

(5) $3a(2a+6) =$

(6) $3y(1y-3x) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $3b(3b + 6x) =$

(2) $5b(3b - 2y) =$

(3) $4x(1x - 3) =$

(4) $2x(3x + 3b) =$

(5) $(x + 3)(x - 5) =$

(6) $4x(2x - 3a) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $5(2x + 2) =$

(2) $2(3y - 4b) =$

(3) $4(2a + 2) =$

(4) $2(3a - 1) =$

(5) $5(2x + 5) =$

(6) $2(x - 1b) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $4y(3y + 6) =$

(2) $4b(2b + 3y) =$

(3) $(y - 3)(y + 1) =$

(4) $4b(3b - 4y) =$

(5) $(y - 6)(y - 5) =$

(6) $2y(3y + 4x) =$

Section 6. Graphs of Quadratic Functions

Complete the table and sketch the graph.

(1) $(y-1)(y-2) =$

(2) $(a+2)(a+5) =$

(3) $3a(1a-1) =$

(4) $3a(2a+6) =$

(5) $5x(3x-3) =$

(6) $(a-3)(a+5) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $2(a + 3b) =$

(2) $5(4x + 7) =$

(3) $2(4x - 3) =$

(4) $4(2y + 1) =$

(5) $4(3a + 1x) =$

(6) $5(a + 2y) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $4a + 4(-1a + 4b) =$

(2) $2y + 3(-1y + 2b) =$

(3) $2y + 3(-3y + 2x) =$

(4) $3(b + 1) + 4(b + 3) =$

(5) $4(a + 1) + 2(a - 1) =$

(6) $4(a + 2) + 3(a + 5) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $4(b-2) =$

(2) $-2(x+1a) =$

(3) $3(2y+1) =$

(4) $3(a+6) =$

(5) $5(2x+3y) =$

(6) $4(y-4) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $2(b + 2x) =$

(2) $-2(x + 1y) =$

(3) $-4(3a - 4b) =$

(4) $-5(x - 1a) =$

(5) $5(a - 6) =$

(6) $5(y + 4) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $4(x - 3a) =$

(2) $2(3b + 8) =$

(3) $4(4b + 4) =$

(4) $4(2a + 4) =$

(5) $3(3a + 2) =$

(6) $4(y - 3a) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $5a + 3(2a + 1b) =$

(2) $3y + 3(3y + 1a) =$

(3) $5(x + 1) + 2(x - 4) =$

(4) $4y + 3(3y + 4x) =$

(5) $5(x + 1) + 4(x + 1) =$

(6) $3(a + 4) + 4(a + 5) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $4x + 4(4x + 1y) =$

(2) $4(x + 2) + 3(x - 5) =$

(3) $4(y + 3) + 3(y - 5) =$

(4) $2(y + 4) + 4(y + 1) =$

(5) $4(a + 4) + 4(a + 4) =$

(6) $3(x + 1) + 4(x - 1) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $4(b+2)+4(b+2)=$

(2) $3a+4(4a+1y)=$

(3) $4y+3(-1y+2x)=$

(4) $4(x+4)+4(x-4)=$

(5) $4(x+4)+2(x-2)=$

(6) $2a+2(3a+3y)=$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $3(y+2)+2(y+3)=$

(2) $5(a+4)+4(a+3)=$

(3) $4(a+4)+3(a+1)=$

(4) $2(x+3)+2(x+2)=$

(5) $4y+3(-1y+1a)=$

(6) $3(b+4)+2(b-5)=$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $(y+3)(y-3) =$

(2) $(x+5)^2 =$

(3) $(y-2)^2 =$

(4) $(y+4)(y-4) =$

(5) $(x+3)(x-3) =$

(6) $(x+2)(x-2) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $(a+3)(a-3) =$

(2) $(y+4)^2 =$

(3) $(x-4)^2 =$

(4) $(x-3)^2 =$

(5) $(a+4)(a-4) =$

(6) $(a-7)^2 =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $(a+3)(a-3) =$

(2) $(a+6)^2 =$

(3) $(x+8)^2 =$

(4) $(a+7)^2 =$

(5) $(a-6)^2 =$

(6) $(y-2)^2 =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $(y+6)^2 =$

(2) $(a+4)^2 =$

(3) $(y+7)(y-7) =$

(4) $(y-2)^2 =$

(5) $(x-4)^2 =$

(6) $(a-6)^2 =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $3y(4y - 4a) =$

(2) $3x(2x + 4) =$

(3) $(x + 4)(x + 6) =$

(4) $2y(1y + 3) =$

(5) $(a - 2)(a + 5) =$

(6) $(y + 6)(y + 3) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $(a-6)^2 =$

(2) $(x+3)^2 =$

(3) $(x+6)^2 =$

(4) $(y+8)^2 =$

(5) $(x+8)(x-8) =$

(6) $(a-5)^2 =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $(y + 6)(y + 6) =$

(2) $4b(3b - 4) =$

(3) $(x - 4)(x + 2) =$

(4) $4b(1b + 1) =$

(5) $3a(2a + 6) =$

(6) $3y(1y - 3x) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $3b(3b + 6x) =$

(2) $5b(3b - 2y) =$

(3) $4x(1x - 3) =$

(4) $2x(3x + 3b) =$

(5) $(x + 3)(x - 5) =$

(6) $4x(2x - 3a) =$

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Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $4y(3y + 6) =$

(2) $4b(2b + 3y) =$

(3) $(y - 3)(y + 1) =$

(4) $4b(3b - 4y) =$

(5) $(y - 6)(y - 5) =$

(6) $2y(3y + 4x) =$

Section 7. The Pythagorean Theorem

Use the Pythagorean theorem to find the missing side.

(1) $(y-1)(y-2) =$

(2) $(a+2)(a+5) =$

(3) $3a(1a-1) =$

(4) $3a(2a+6) =$

(5) $5x(3x-3) =$

(6) $(a-3)(a+5) =$

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Section 1 - Solutions

10a-1: $2a + 6b$

10a-2: $20x + 35$

10a-3: $8x - 6$

10a-4: $8y + 4$

10a-5: $12a + 4x$

10a-6: $5a + 10y$

10b-1: $2a + 6b$

10b-2: $20x + 35$

10b-3: $8x - 6$

10b-4: $8y + 4$

10b-5: $12a + 4x$

10b-6: $5a + 10y$

1a-1: $2a + 6b$

1a-2: $20x + 35$

1a-3: $8x - 6$

Section 1 - Solutions (continued)

1a-4: $8y + 4$

1a-5: $12a + 4x$

1a-6: $5a + 10y$

1b-1: $2a + 6b$

1b-2: $20x + 35$

1b-3: $8x - 6$

1b-4: $8y + 4$

1b-5: $12a + 4x$

1b-6: $5a + 10y$

2a-1: $2a + 6b$

2a-2: $20x + 35$

2a-3: $8x - 6$

2a-4: $8y + 4$

2a-5: $12a + 4x$

2a-6: $5a + 10y$

Section 1 - Solutions (continued)

2b-1: $2a + 6b$

2b-2: $20x + 35$

2b-3: $8x - 6$

2b-4: $8y + 4$

2b-5: $12a + 4x$

2b-6: $5a + 10y$

3a-1: $2a + 6b$

3a-2: $20x + 35$

3a-3: $8x - 6$

3a-4: $8y + 4$

3a-5: $12a + 4x$

3a-6: $5a + 10y$

3b-1: $2a + 6b$

3b-2: $20x + 35$

3b-3: $8x - 6$

Section 1 - Solutions (continued)

3b-4: $8y + 4$

3b-5: $12a + 4x$

3b-6: $5a + 10y$

4a-1: $2a + 6b$

4a-2: $20x + 35$

4a-3: $8x - 6$

4a-4: $8y + 4$

4a-5: $12a + 4x$

4a-6: $5a + 10y$

4b-1: $2a + 6b$

4b-2: $20x + 35$

4b-3: $8x - 6$

4b-4: $8y + 4$

4b-5: $12a + 4x$

4b-6: $5a + 10y$

Section 1 - Solutions (continued)

5a-1: $2a + 6b$

5a-2: $20x + 35$

5a-3: $8x - 6$

5a-4: $8y + 4$

5a-5: $12a + 4x$

5a-6: $5a + 10y$

5b-1: $2a + 6b$

5b-2: $20x + 35$

5b-3: $8x - 6$

5b-4: $8y + 4$

5b-5: $12a + 4x$

5b-6: $5a + 10y$

6a-1: $2a + 6b$

6a-2: $20x + 35$

6a-3: $8x - 6$

Section 1 - Solutions (continued)

6a-4: $8y + 4$

6a-5: $12a + 4x$

6a-6: $5a + 10y$

6b-1: $2a + 6b$

6b-2: $20x + 35$

6b-3: $8x - 6$

6b-4: $8y + 4$

6b-5: $12a + 4x$

6b-6: $5a + 10y$

7a-1: $2a + 6b$

7a-2: $20x + 35$

7a-3: $8x - 6$

7a-4: $8y + 4$

7a-5: $12a + 4x$

7a-6: $5a + 10y$

Section 1 - Solutions (continued)

7b-1: $2a + 6b$

7b-2: $20x + 35$

7b-3: $8x - 6$

7b-4: $8y + 4$

7b-5: $12a + 4x$

7b-6: $5a + 10y$

8a-1: $2a + 6b$

8a-2: $20x + 35$

8a-3: $8x - 6$

8a-4: $8y + 4$

8a-5: $12a + 4x$

8a-6: $5a + 10y$

8b-1: $2a + 6b$

8b-2: $20x + 35$

8b-3: $8x - 6$

Section 1 - Solutions (continued)

8b-4: $8y + 4$

8b-5: $12a + 4x$

8b-6: $5a + 10y$

9a-1: $2a + 6b$

9a-2: $20x + 35$

9a-3: $8x - 6$

9a-4: $8y + 4$

9a-5: $12a + 4x$

9a-6: $5a + 10y$

9b-1: $2a + 6b$

9b-2: $20x + 35$

9b-3: $8x - 6$

9b-4: $8y + 4$

9b-5: $12a + 4x$

9b-6: $5a + 10y$

Section 2 - Solutions

11a-1: $a^2 - 16$

11a-2: $x^2 + 12x + 36$

11a-3: $x^2 - 36$

11a-4: $a^2 - 9$

11a-5: $x^2 + 6x + 9$

11a-6: $x^2 + 14x + 49$

11b-1: $a^2 - 16$

11b-2: $x^2 + 12x + 36$

11b-3: $x^2 - 36$

11b-4: $a^2 - 9$

11b-5: $x^2 + 6x + 9$

11b-6: $x^2 + 14x + 49$

12a-1: $a^2 - 16$

12a-2: $x^2 + 12x + 36$

12a-3: $x^2 - 36$

Section 2 - Solutions (continued)

12a-4: $a^2 - 9$

12a-5: $x^2 + 6x + 9$

12a-6: $x^2 + 14x + 49$

12b-1: $a^2 - 16$

12b-2: $x^2 + 12x + 36$

12b-3: $x^2 - 36$

12b-4: $a^2 - 9$

12b-5: $x^2 + 6x + 9$

12b-6: $x^2 + 14x + 49$

13a-1: $a^2 - 16$

13a-2: $x^2 + 12x + 36$

13a-3: $x^2 - 36$

13a-4: $a^2 - 9$

13a-5: $x^2 + 6x + 9$

13a-6: $x^2 + 14x + 49$

Section 2 - Solutions (continued)

13b-1: $a^2 - 16$

13b-2: $x^2 + 12x + 36$

13b-3: $x^2 - 36$

13b-4: $a^2 - 9$

13b-5: $x^2 + 6x + 9$

13b-6: $x^2 + 14x + 49$

14a-1: $a^2 - 16$

14a-2: $x^2 + 12x + 36$

14a-3: $x^2 - 36$

14a-4: $a^2 - 9$

14a-5: $x^2 + 6x + 9$

14a-6: $x^2 + 14x + 49$

14b-1: $a^2 - 16$

14b-2: $x^2 + 12x + 36$

14b-3: $x^2 - 36$

Section 2 - Solutions (continued)

14b-4: $a^2 - 9$

14b-5: $x^2 + 6x + 9$

14b-6: $x^2 + 14x + 49$

15a-1: $a^2 - 16$

15a-2: $x^2 + 12x + 36$

15a-3: $x^2 - 36$

15a-4: $a^2 - 9$

15a-5: $x^2 + 6x + 9$

15a-6: $x^2 + 14x + 49$

15b-1: $a^2 - 16$

15b-2: $x^2 + 12x + 36$

15b-3: $x^2 - 36$

15b-4: $a^2 - 9$

15b-5: $x^2 + 6x + 9$

15b-6: $x^2 + 14x + 49$

Section 2 - Solutions (continued)

16a-1: $a^2 - 16$

16a-2: $x^2 + 12x + 36$

16a-3: $x^2 - 36$

16a-4: $a^2 - 9$

16a-5: $x^2 + 6x + 9$

16a-6: $x^2 + 14x + 49$

16b-1: $a^2 - 16$

16b-2: $x^2 + 12x + 36$

16b-3: $x^2 - 36$

16b-4: $a^2 - 9$

16b-5: $x^2 + 6x + 9$

16b-6: $x^2 + 14x + 49$

17a-1: $a^2 - 16$

17a-2: $x^2 + 12x + 36$

17a-3: $x^2 - 36$

Section 2 - Solutions (continued)

17a-4: $a^2 - 9$

17a-5: $x^2 + 6x + 9$

17a-6: $x^2 + 14x + 49$

17b-1: $a^2 - 16$

17b-2: $x^2 + 12x + 36$

17b-3: $x^2 - 36$

17b-4: $a^2 - 9$

17b-5: $x^2 + 6x + 9$

17b-6: $x^2 + 14x + 49$

18a-1: $a^2 - 16$

18a-2: $x^2 + 12x + 36$

18a-3: $x^2 - 36$

18a-4: $a^2 - 9$

18a-5: $x^2 + 6x + 9$

18a-6: $x^2 + 14x + 49$

Section 2 - Solutions (continued)

18b-1: $a^2 - 16$

18b-2: $x^2 + 12x + 36$

18b-3: $x^2 - 36$

18b-4: $a^2 - 9$

18b-5: $x^2 + 6x + 9$

18b-6: $x^2 + 14x + 49$

19a-1: $a^2 - 16$

19a-2: $x^2 + 12x + 36$

19a-3: $x^2 - 36$

19a-4: $a^2 - 9$

19a-5: $x^2 + 6x + 9$

19a-6: $x^2 + 14x + 49$

19b-1: $a^2 - 16$

19b-2: $x^2 + 12x + 36$

19b-3: $x^2 - 36$

Section 2 - Solutions (continued)

19b-4: $a^2 - 9$

19b-5: $x^2 + 6x + 9$

19b-6: $x^2 + 14x + 49$

20a-1: $a^2 - 16$

20a-2: $x^2 + 12x + 36$

20a-3: $x^2 - 36$

20a-4: $a^2 - 9$

20a-5: $x^2 + 6x + 9$

20a-6: $x^2 + 14x + 49$

20b-1: $a^2 - 16$

20b-2: $x^2 + 12x + 36$

20b-3: $x^2 - 36$

20b-4: $a^2 - 9$

20b-5: $x^2 + 6x + 9$

20b-6: $x^2 + 14x + 49$

Section 3 - Solutions

21a-1: $y^2 + 1y - 2$

21a-2: $y^2 - 6y + 8$

21a-3: $x^2 - 1$

21a-4: $6a^2 + 27a$

21a-5: $y^2 - 8y + 12$

21a-6: $x^2 - 6x + 9$

21b-1: $y^2 + 1y - 2$

21b-2: $5a^2 - 40a$

21b-3: $12x^2 + 36x$

21b-4: $y^2 + 2y - 8$

21b-5: $y^2 - 8y + 12$

21b-6: $x^2 - 6x + 9$

22a-1: $y^2 + 1y - 2$

22a-2: $5a^2 - 40a$

22a-3: $12x^2 + 36x$

Section 3 - Solutions (continued)

22a-4: $y^2 + 2y - 8$

22a-5: $4y^2 + 36y$

22a-6: $x^2 - 6x + 9$

22b-1: $4x^2 + 14x$

22b-2: $5a^2 - 40a$

22b-3: $12x^2 + 36x$

22b-4: $y^2 + 2y - 8$

22b-5: $y^2 - 8y + 12$

22b-6: $x^2 - 6x + 9$

23a-1: $y^2 + 1y - 2$

23a-2: $5a^2 - 40a$

23a-3: $x^2 - 1$

23a-4: $y^2 + 2y - 8$

23a-5: $4y^2 + 36y$

23a-6: $x^2 - 6x + 9$

Section 3 - Solutions (continued)

23b-1: $4x^2 + 14x$

23b-2: $5a^2 - 40a$

23b-3: $x^2 - 1$

23b-4: $6a^2 + 27a$

23b-5: $4y^2 + 36y$

23b-6: $8a^2 - 28a$

24a-1: $4x^2 + 14x$

24a-2: $5a^2 - 40a$

24a-3: $12x^2 + 36x$

24a-4: $y^2 + 2y - 8$

24a-5: $4y^2 + 36y$

24a-6: $x^2 - 6x + 9$

24b-1: $y^2 + 1y - 2$

24b-2: $5a^2 - 40a$

24b-3: $12x^2 + 36x$

Section 3 - Solutions (continued)

24b-4: $y^2 + 2y - 8$

24b-5: $4y^2 + 36y$

24b-6: $8a^2 - 28a$

25a-1: $y^2 + 1y - 2$

25a-2: $5a^2 - 40a$

25a-3: $x^2 - 1$

25a-4: $y^2 + 2y - 8$

25a-5: $4y^2 + 36y$

25a-6: $x^2 - 6x + 9$

25b-1: $4x^2 + 14x$

25b-2: $y^2 - 6y + 8$

25b-3: $12x^2 + 36x$

25b-4: $6a^2 + 27a$

25b-5: $4y^2 + 36y$

25b-6: $8a^2 - 28a$

Section 3 - Solutions (continued)

26a-1: $y^2 + 1y - 2$

26a-2: $y^2 - 6y + 8$

26a-3: $x^2 - 1$

26a-4: $6a^2 + 27a$

26a-5: $y^2 - 8y + 12$

26a-6: $8a^2 - 28a$

26b-1: $y^2 + 1y - 2$

26b-2: $y^2 - 6y + 8$

26b-3: $12x^2 + 36x$

26b-4: $y^2 + 2y - 8$

26b-5: $y^2 - 8y + 12$

26b-6: $8a^2 - 28a$

27a-1: $4x^2 + 14x$

27a-2: $5a^2 - 40a$

27a-3: $x^2 - 1$

Section 3 - Solutions (continued)

27a-4: $6a^2 + 27a$

27a-5: $y^2 - 8y + 12$

27a-6: $8a^2 - 28a$

27b-1: $y^2 + 1y - 2$

27b-2: $5a^2 - 40a$

27b-3: $x^2 - 1$

27b-4: $y^2 + 2y - 8$

27b-5: $4y^2 + 36y$

27b-6: $x^2 - 6x + 9$

28a-1: $y^2 + 1y - 2$

28a-2: $y^2 - 6y + 8$

28a-3: $x^2 - 1$

28a-4: $y^2 + 2y - 8$

28a-5: $4y^2 + 36y$

28a-6: $8a^2 - 28a$

Section 3 - Solutions (continued)

28b-1: $4x^2 + 14x$

28b-2: $y^2 - 6y + 8$

28b-3: $12x^2 + 36x$

28b-4: $6a^2 + 27a$

28b-5: $4y^2 + 36y$

28b-6: $x^2 - 6x + 9$

29a-1: $4x^2 + 14x$

29a-2: $5a^2 - 40a$

29a-3: $12x^2 + 36x$

29a-4: $y^2 + 2y - 8$

29a-5: $4y^2 + 36y$

29a-6: $x^2 - 6x + 9$

29b-1: $y^2 + 1y - 2$

29b-2: $5a^2 - 40a$

29b-3: $12x^2 + 36x$

Section 3 - Solutions (continued)

29b-4: $6a^2 + 27a$

29b-5: $4y^2 + 36y$

29b-6: $x^2 - 6x + 9$

30a-1: $y^2 + 1y - 2$

30a-2: $y^2 - 6y + 8$

30a-3: $12x^2 + 36x$

30a-4: $y^2 + 2y - 8$

30a-5: $4y^2 + 36y$

30a-6: $x^2 - 6x + 9$

30b-1: $4x^2 + 14x$

30b-2: $y^2 - 6y + 8$

30b-3: $x^2 - 1$

30b-4: $6a^2 + 27a$

30b-5: $4y^2 + 36y$

30b-6: $x^2 - 6x + 9$

Section 4 - Solutions

31a-1: $6\sqrt{6}$

31a-2: 4

31a-3: $3\sqrt{2}$

31a-4: $3\sqrt{3}$

31a-5: $3\sqrt{5}$

31a-6: $4\sqrt{5}$

31b-1: $6\sqrt{6}$

31b-2: 4

31b-3: $3\sqrt{2}$

31b-4: $3\sqrt{3}$

31b-5: $3\sqrt{5}$

31b-6: $4\sqrt{5}$

32a-1: $6\sqrt{6}$

32a-2: 4

32a-3: $3\sqrt{2}$

Section 4 - Solutions (continued)

32a-4: $3\sqrt{3}$

32a-5: $3\sqrt{5}$

32a-6: $4\sqrt{5}$

32b-1: $6\sqrt{6}$

32b-2: 4

32b-3: $3\sqrt{2}$

32b-4: $3\sqrt{3}$

32b-5: $3\sqrt{5}$

32b-6: $4\sqrt{5}$

33a-1: $6\sqrt{6}$

33a-2: 4

33a-3: $3\sqrt{2}$

33a-4: $3\sqrt{3}$

33a-5: $3\sqrt{5}$

33a-6: $4\sqrt{5}$

Section 4 - Solutions (continued)

33b-1: $6\sqrt{6}$

33b-2: 4

33b-3: $3\sqrt{2}$

33b-4: $3\sqrt{3}$

33b-5: $3\sqrt{5}$

33b-6: $4\sqrt{5}$

34a-1: $6\sqrt{6}$

34a-2: 4

34a-3: $3\sqrt{2}$

34a-4: $3\sqrt{3}$

34a-5: $3\sqrt{5}$

34a-6: $4\sqrt{5}$

34b-1: $6\sqrt{6}$

34b-2: 4

34b-3: $3\sqrt{2}$

Section 4 - Solutions (continued)

34b-4: $3\sqrt{3}$

34b-5: $3\sqrt{5}$

34b-6: $4\sqrt{5}$

35a-1: $6\sqrt{6}$

35a-2: 4

35a-3: $3\sqrt{2}$

35a-4: $3\sqrt{3}$

35a-5: $3\sqrt{5}$

35a-6: $4\sqrt{5}$

35b-1: $6\sqrt{6}$

35b-2: 4

35b-3: $3\sqrt{2}$

35b-4: $3\sqrt{3}$

35b-5: $3\sqrt{5}$

35b-6: $4\sqrt{5}$

Section 4 - Solutions (continued)

36a-1: $6\sqrt{6}$

36a-2: 4

36a-3: $3\sqrt{2}$

36a-4: $3\sqrt{3}$

36a-5: $3\sqrt{5}$

36a-6: $4\sqrt{5}$

36b-1: $6\sqrt{6}$

36b-2: 4

36b-3: $3\sqrt{2}$

36b-4: $3\sqrt{3}$

36b-5: $3\sqrt{5}$

36b-6: $4\sqrt{5}$

37a-1: $6\sqrt{6}$

37a-2: 4

37a-3: $3\sqrt{2}$

Section 4 - Solutions (continued)

37a-4: $3\sqrt{3}$

37a-5: $3\sqrt{5}$

37a-6: $4\sqrt{5}$

37b-1: $6\sqrt{6}$

37b-2: 4

37b-3: $3\sqrt{2}$

37b-4: $3\sqrt{3}$

37b-5: $3\sqrt{5}$

37b-6: $4\sqrt{5}$

38a-1: $6\sqrt{6}$

38a-2: 4

38a-3: $3\sqrt{2}$

38a-4: $3\sqrt{3}$

38a-5: $3\sqrt{5}$

38a-6: $4\sqrt{5}$

Section 4 - Solutions (continued)

38b-1: $6\sqrt{6}$

38b-2: 4

38b-3: $3\sqrt{2}$

38b-4: $3\sqrt{3}$

38b-5: $3\sqrt{5}$

38b-6: $4\sqrt{5}$

39a-1: $6\sqrt{6}$

39a-2: 4

39a-3: $3\sqrt{2}$

39a-4: $3\sqrt{3}$

39a-5: $3\sqrt{5}$

39a-6: $4\sqrt{5}$

39b-1: $6\sqrt{6}$

39b-2: 4

39b-3: $3\sqrt{2}$

Section 4 - Solutions (continued)

39b-4: $3\sqrt{3}$

39b-5: $3\sqrt{5}$

39b-6: $4\sqrt{5}$

40a-1: $6\sqrt{6}$

40a-2: 4

40a-3: $3\sqrt{2}$

40a-4: $3\sqrt{3}$

40a-5: $3\sqrt{5}$

40a-6: $4\sqrt{5}$

40b-1: $6\sqrt{6}$

40b-2: 4

40b-3: $3\sqrt{2}$

40b-4: $3\sqrt{3}$

40b-5: $3\sqrt{5}$

40b-6: $4\sqrt{5}$

Section 5 - Solutions

41a-1: $y^2 + 1y - 2$

41a-2: $5a^2 - 40a$

41a-3: $x^2 - 1$

41a-4: $6a^2 + 27a$

41a-5: $4y^2 + 36y$

41a-6: $8a^2 - 28a$

41b-1: $y^2 + 1y - 2$

41b-2: $5a^2 - 40a$

41b-3: $12x^2 + 36x$

41b-4: $6a^2 + 27a$

41b-5: $4y^2 + 36y$

41b-6: $8a^2 - 28a$

42a-1: $y^2 + 1y - 2$

42a-2: $5a^2 - 40a$

42a-3: $12x^2 + 36x$

Section 5 - Solutions (continued)

42a-4: $6a^2 + 27a$

42a-5: $4y^2 + 36y$

42a-6: $8a^2 - 28a$

42b-1: $4x^2 + 14x$

42b-2: $5a^2 - 40a$

42b-3: $12x^2 + 36x$

42b-4: $y^2 + 2y - 8$

42b-5: $4y^2 + 36y$

42b-6: $8a^2 - 28a$

43a-1: $4x^2 + 14x$

43a-2: $y^2 - 6y + 8$

43a-3: $12x^2 + 36x$

43a-4: $6a^2 + 27a$

43a-5: $4y^2 + 36y$

43a-6: $8a^2 - 28a$

Section 5 - Solutions (continued)

43b-1: $y^2 + 1y - 2$

43b-2: $5a^2 - 40a$

43b-3: $x^2 - 1$

43b-4: $6a^2 + 27a$

43b-5: $y^2 - 8y + 12$

43b-6: $8a^2 - 28a$

44a-1: $y^2 + 1y - 2$

44a-2: $5a^2 - 40a$

44a-3: $x^2 - 1$

44a-4: $y^2 + 2y - 8$

44a-5: $y^2 - 8y + 12$

44a-6: $x^2 - 6x + 9$

44b-1: $4x^2 + 14x$

44b-2: $y^2 - 6y + 8$

44b-3: $12x^2 + 36x$

Section 5 - Solutions (continued)

44b-4: $y^2 + 2y - 8$

44b-5: $y^2 - 8y + 12$

44b-6: $8a^2 - 28a$

45a-1: $y^2 + 1y - 2$

45a-2: $y^2 - 6y + 8$

45a-3: $x^2 - 1$

45a-4: $6a^2 + 27a$

45a-5: $4y^2 + 36y$

45a-6: $8a^2 - 28a$

45b-1: $4x^2 + 14x$

45b-2: $y^2 - 6y + 8$

45b-3: $12x^2 + 36x$

45b-4: $6a^2 + 27a$

45b-5: $y^2 - 8y + 12$

45b-6: $8a^2 - 28a$

Section 5 - Solutions (continued)

46a-1: $y^2 + 1y - 2$

46a-2: $5a^2 - 40a$

46a-3: $x^2 - 1$

46a-4: $6a^2 + 27a$

46a-5: $y^2 - 8y + 12$

46a-6: $x^2 - 6x + 9$

46b-1: $y^2 + 1y - 2$

46b-2: $y^2 - 6y + 8$

46b-3: $x^2 - 1$

46b-4: $y^2 + 2y - 8$

46b-5: $y^2 - 8y + 12$

46b-6: $x^2 - 6x + 9$

47a-1: $y^2 + 1y - 2$

47a-2: $y^2 - 6y + 8$

47a-3: $12x^2 + 36x$

Section 5 - Solutions (continued)

47a-4: $y^2 + 2y - 8$

47a-5: $y^2 - 8y + 12$

47a-6: $8a^2 - 28a$

47b-1: $y^2 + 1y - 2$

47b-2: $5a^2 - 40a$

47b-3: $x^2 - 1$

47b-4: $6a^2 + 27a$

47b-5: $y^2 - 8y + 12$

47b-6: $x^2 - 6x + 9$

48a-1: $4x^2 + 14x$

48a-2: $y^2 - 6y + 8$

48a-3: $12x^2 + 36x$

48a-4: $6a^2 + 27a$

48a-5: $y^2 - 8y + 12$

48a-6: $x^2 - 6x + 9$

Section 5 - Solutions (continued)

48b-1: $y^2 + 1y - 2$

48b-2: $5a^2 - 40a$

48b-3: $x^2 - 1$

48b-4: $6a^2 + 27a$

48b-5: $y^2 - 8y + 12$

48b-6: $x^2 - 6x + 9$

49a-1: $y^2 + 1y - 2$

49a-2: $5a^2 - 40a$

49a-3: $x^2 - 1$

49a-4: $6a^2 + 27a$

49a-5: $y^2 - 8y + 12$

49a-6: $8a^2 - 28a$

49b-1: $y^2 + 1y - 2$

49b-2: $5a^2 - 40a$

49b-3: $12x^2 + 36x$

Section 5 - Solutions (continued)

49b-4: $6a^2 + 27a$

49b-5: $4y^2 + 36y$

49b-6: $8a^2 - 28a$

50a-1: $4x^2 + 14x$

50a-2: $5a^2 - 40a$

50a-3: $12x^2 + 36x$

50a-4: $y^2 + 2y - 8$

50a-5: $4y^2 + 36y$

50a-6: $x^2 - 6x + 9$

50b-1: $y^2 + 1y - 2$

50b-2: $y^2 - 6y + 8$

50b-3: $x^2 - 1$

50b-4: $6a^2 + 27a$

50b-5: $4y^2 + 36y$

50b-6: $8a^2 - 28a$

Section 6 - Solutions

51a-1: $y^2 + 1y - 2$

51a-2: $5a^2 - 40a$

51a-3: $12x^2 + 36x$

51a-4: $y^2 + 2y - 8$

51a-5: $y^2 - 8y + 12$

51a-6: $x^2 - 6x + 9$

51b-1: $y^2 + 1y - 2$

51b-2: $5a^2 - 40a$

51b-3: $x^2 - 1$

51b-4: $6a^2 + 27a$

51b-5: $4y^2 + 36y$

51b-6: $x^2 - 6x + 9$

52a-1: $4x^2 + 14x$

52a-2: $y^2 - 6y + 8$

52a-3: $12x^2 + 36x$

Section 6 - Solutions (continued)

52a-4: $6a^2 + 27a$

52a-5: $4y^2 + 36y$

52a-6: $x^2 - 6x + 9$

52b-1: $4x^2 + 14x$

52b-2: $y^2 - 6y + 8$

52b-3: $x^2 - 1$

52b-4: $y^2 + 2y - 8$

52b-5: $y^2 - 8y + 12$

52b-6: $x^2 - 6x + 9$

53a-1: $4x^2 + 14x$

53a-2: $y^2 - 6y + 8$

53a-3: $x^2 - 1$

53a-4: $6a^2 + 27a$

53a-5: $4y^2 + 36y$

53a-6: $8a^2 - 28a$

Section 6 - Solutions (continued)

53b-1: $4x^2 + 14x$

53b-2: $y^2 - 6y + 8$

53b-3: $x^2 - 1$

53b-4: $6a^2 + 27a$

53b-5: $4y^2 + 36y$

53b-6: $x^2 - 6x + 9$

54a-1: $4x^2 + 14x$

54a-2: $5a^2 - 40a$

54a-3: $x^2 - 1$

54a-4: $6a^2 + 27a$

54a-5: $4y^2 + 36y$

54a-6: $8a^2 - 28a$

54b-1: $4x^2 + 14x$

54b-2: $5a^2 - 40a$

54b-3: $x^2 - 1$

Section 6 - Solutions (continued)

54b-4: $y^2 + 2y - 8$

54b-5: $4y^2 + 36y$

54b-6: $x^2 - 6x + 9$

55a-1: $4x^2 + 14x$

55a-2: $y^2 - 6y + 8$

55a-3: $12x^2 + 36x$

55a-4: $6a^2 + 27a$

55a-5: $4y^2 + 36y$

55a-6: $8a^2 - 28a$

55b-1: $y^2 + 1y - 2$

55b-2: $y^2 - 6y + 8$

55b-3: $12x^2 + 36x$

55b-4: $y^2 + 2y - 8$

55b-5: $4y^2 + 36y$

55b-6: $x^2 - 6x + 9$

Section 6 - Solutions (continued)

56a-1: $4x^2 + 14x$

56a-2: $5a^2 - 40a$

56a-3: $12x^2 + 36x$

56a-4: $6a^2 + 27a$

56a-5: $4y^2 + 36y$

56a-6: $x^2 - 6x + 9$

56b-1: $y^2 + 1y - 2$

56b-2: $y^2 - 6y + 8$

56b-3: $12x^2 + 36x$

56b-4: $y^2 + 2y - 8$

56b-5: $4y^2 + 36y$

56b-6: $x^2 - 6x + 9$

57a-1: $4x^2 + 14x$

57a-2: $y^2 - 6y + 8$

57a-3: $12x^2 + 36x$

Section 6 - Solutions (continued)

57a-4: $6a^2 + 27a$

57a-5: $4y^2 + 36y$

57a-6: $8a^2 - 28a$

57b-1: $y^2 + 1y - 2$

57b-2: $5a^2 - 40a$

57b-3: $12x^2 + 36x$

57b-4: $y^2 + 2y - 8$

57b-5: $4y^2 + 36y$

57b-6: $x^2 - 6x + 9$

58a-1: $4x^2 + 14x$

58a-2: $5a^2 - 40a$

58a-3: $x^2 - 1$

58a-4: $6a^2 + 27a$

58a-5: $4y^2 + 36y$

58a-6: $8a^2 - 28a$

Section 6 - Solutions (continued)

58b-1: $y^2 + 1y - 2$

58b-2: $y^2 - 6y + 8$

58b-3: $x^2 - 1$

58b-4: $6a^2 + 27a$

58b-5: $y^2 - 8y + 12$

58b-6: $8a^2 - 28a$

59a-1: $4x^2 + 14x$

59a-2: $y^2 - 6y + 8$

59a-3: $12x^2 + 36x$

59a-4: $6a^2 + 27a$

59a-5: $4y^2 + 36y$

59a-6: $x^2 - 6x + 9$

59b-1: $y^2 + 1y - 2$

59b-2: $5a^2 - 40a$

59b-3: $x^2 - 1$

Section 6 - Solutions (continued)

59b-4: $6a^2 + 27a$

59b-5: $4y^2 + 36y$

59b-6: $8a^2 - 28a$

60a-1: $y^2 + 1y - 2$

60a-2: $y^2 - 6y + 8$

60a-3: $x^2 - 1$

60a-4: $6a^2 + 27a$

60a-5: $4y^2 + 36y$

60a-6: $8a^2 - 28a$

60b-1: $y^2 + 1y - 2$

60b-2: $y^2 - 6y + 8$

60b-3: $12x^2 + 36x$

60b-4: $y^2 + 2y - 8$

60b-5: $y^2 - 8y + 12$

60b-6: $x^2 - 6x + 9$

Section 7 - Solutions

61a-1: $4x^2 + 14x$

61a-2: $y^2 - 6y + 8$

61a-3: $x^2 - 1$

61a-4: $6a^2 + 27a$

61a-5: $4y^2 + 36y$

61a-6: $8a^2 - 28a$

61b-1: $4x^2 + 14x$

61b-2: $5a^2 - 40a$

61b-3: $12x^2 + 36x$

61b-4: $6a^2 + 27a$

61b-5: $4y^2 + 36y$

61b-6: $8a^2 - 28a$

62a-1: $4x^2 + 14x$

62a-2: $y^2 - 6y + 8$

62a-3: $x^2 - 1$

Section 7 - Solutions (continued)

62a-4: $6a^2 + 27a$

62a-5: $y^2 - 8y + 12$

62a-6: $8a^2 - 28a$

62b-1: $4x^2 + 14x$

62b-2: $5a^2 - 40a$

62b-3: $x^2 - 1$

62b-4: $6a^2 + 27a$

62b-5: $y^2 - 8y + 12$

62b-6: $x^2 - 6x + 9$

63a-1: $4x^2 + 14x$

63a-2: $5a^2 - 40a$

63a-3: $x^2 - 1$

63a-4: $y^2 + 2y - 8$

63a-5: $y^2 - 8y + 12$

63a-6: $x^2 - 6x + 9$

Section 7 - Solutions (continued)

63b-1: $4x^2 + 14x$

63b-2: $y^2 - 6y + 8$

63b-3: $12x^2 + 36x$

63b-4: $6a^2 + 27a$

63b-5: $y^2 - 8y + 12$

63b-6: $x^2 - 6x + 9$

64a-1: $4x^2 + 14x$

64a-2: $5a^2 - 40a$

64a-3: $x^2 - 1$

64a-4: $y^2 + 2y - 8$

64a-5: $4y^2 + 36y$

64a-6: $8a^2 - 28a$

64b-1: $4x^2 + 14x$

64b-2: $y^2 - 6y + 8$

64b-3: $12x^2 + 36x$

Section 7 - Solutions (continued)

64b-4: $6a^2 + 27a$

64b-5: $y^2 - 8y + 12$

64b-6: $x^2 - 6x + 9$

65a-1: $4x^2 + 14x$

65a-2: $y^2 - 6y + 8$

65a-3: $12x^2 + 36x$

65a-4: $y^2 + 2y - 8$

65a-5: $y^2 - 8y + 12$

65a-6: $8a^2 - 28a$

65b-1: $y^2 + 1y - 2$

65b-2: $y^2 - 6y + 8$

65b-3: $12x^2 + 36x$

65b-4: $6a^2 + 27a$

65b-5: $4y^2 + 36y$

65b-6: $8a^2 - 28a$

Section 7 - Solutions (continued)

66a-1: $4x^2 + 14x$

66a-2: $5a^2 - 40a$

66a-3: $12x^2 + 36x$

66a-4: $y^2 + 2y - 8$

66a-5: $y^2 - 8y + 12$

66a-6: $x^2 - 6x + 9$

66b-1: $y^2 + 1y - 2$

66b-2: $5a^2 - 40a$

66b-3: $x^2 - 1$

66b-4: $y^2 + 2y - 8$

66b-5: $4y^2 + 36y$

66b-6: $x^2 - 6x + 9$

67a-1: $4x^2 + 14x$

67a-2: $y^2 - 6y + 8$

67a-3: $12x^2 + 36x$

Section 7 - Solutions (continued)

67a-4: $6a^2 + 27a$

67a-5: $4y^2 + 36y$

67a-6: $x^2 - 6x + 9$

67b-1: $4x^2 + 14x$

67b-2: $y^2 - 6y + 8$

67b-3: $12x^2 + 36x$

67b-4: $6a^2 + 27a$

67b-5: $4y^2 + 36y$

67b-6: $x^2 - 6x + 9$

68a-1: $y^2 + 1y - 2$

68a-2: $5a^2 - 40a$

68a-3: $12x^2 + 36x$

68a-4: $y^2 + 2y - 8$

68a-5: $4y^2 + 36y$

68a-6: $x^2 - 6x + 9$

Section 7 - Solutions (continued)

68b-1: $y^2 + 1y - 2$

68b-2: $y^2 - 6y + 8$

68b-3: $x^2 - 1$

68b-4: $6a^2 + 27a$

68b-5: $y^2 - 8y + 12$

68b-6: $8a^2 - 28a$

69a-1: $y^2 + 1y - 2$

69a-2: $y^2 - 6y + 8$

69a-3: $x^2 - 1$

69a-4: $6a^2 + 27a$

69a-5: $4y^2 + 36y$

69a-6: $x^2 - 6x + 9$

69b-1: $y^2 + 1y - 2$

69b-2: $y^2 - 6y + 8$

69b-3: $12x^2 + 36x$

Section 7 - Solutions (continued)

69b-4: $6a^2 + 27a$

69b-5: $y^2 - 8y + 12$

69b-6: $8a^2 - 28a$

70a-1: $y^2 + 1y - 2$

70a-2: $y^2 - 6y + 8$

70a-3: $12x^2 + 36x$

70a-4: $y^2 + 2y - 8$

70a-5: $y^2 - 8y + 12$

70a-6: $8a^2 - 28a$

70b-1: $4x^2 + 14x$

70b-2: $y^2 - 6y + 8$

70b-3: $12x^2 + 36x$

70b-4: $y^2 + 2y - 8$

70b-5: $4y^2 + 36y$

70b-6: $8a^2 - 28a$