

All Together (page 91)

- | | |
|---------------|---------------|
| 1. $y = -32$ | 2. $x = 2$ |
| 3. $a = 25$ | 4. $y = -5$ |
| 5. $y = -392$ | 6. $y = -4$ |
| 7. $b = -3$ | 8. $y = -144$ |
| 9. $z = -2$ | 10. $a = 6$ |
| 11. $y = 6/5$ | 12. $x = 1/3$ |
| 13. $x = 5$ | 14. $x = 7$ |
| 15. $x = 8$ | 16. $x = 2$ |

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Variables 2 (page 44)

- | | |
|---------|---------|
| 1. 5 | 11. 9 |
| 2. 2 | 12. 49 |
| 3. 12 | 13. -3 |
| 4. 6 | 14. 3 |
| 5. 7 | 15. -12 |
| 6. 1 | 16. -13 |
| 7. 3 | 17. -9 |
| 8. 20 | 18. -7 |
| 9. 4 | 19. 3 |
| 10. 100 | 20. 9 |

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Complex Equations

- | | |
|---------|--------|
| 1. 9 | 2. 1 |
| 3. 3 | 4. 4 |
| 5. 6 | 6. 3 |
| 7. 4 | 8. -8 |
| 9. 3 | 10. -2 |
| 11. 1/7 | 12. 2 |

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More Complex Equations

- | | |
|--------|--------|
| 1. -25 | 2. 9 |
| 3. 8 | 4. 3 |
| 5. 20 | 6. 12 |
| 7. 5 | 8. 5 |
| 9. 2 | 10. 15 |
| 11. 12 | 12. 0 |
| 13. 10 | 14. 16 |
| 15. 8 | 16. 8 |
| 17. 8 | 18. 8 |
| 19. 8 | 20. 1 |

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Isolating Variables 1

- | | |
|--------|---------|
| 1. -42 | 2. 1/6 |
| 3. -3 | 4. 8 |
| 5. -6 | 6. 2 |
| 7. 10 | 8. -8 |
| 9. 7 | 10. 6 |
| 11. 3 | 12. 2.6 |

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Isolating Variables 2

- | | |
|--------|---------|
| 1. -16 | 2. 4 |
| 3. 6 | 4. 5 |
| 5. 2 | 6. 10 |
| 7. -7 | 8. -1 |
| 9. 9 | 10. 9 |
| 11. 5 | 12. 5.5 |

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Simplifying Polynomials (page 99)

- not standard: $x^6 + x^3 + x^2$
- standard
- not standard: $2x^7 + x^6 + 4x^2 + 3x + 5$
- not standard: $3x^9 + x^8 + x^6 + 3x^3 + 4x + 5$
- standard
- not standard: $50x^6 + 3x^3 + 12x^2 + 100$
- not standard: $5x^4 + 5x^3 + 5x^2 + 5x + 5$
- standard
- not standard: $x^7 + 4x^4 + 4x^3 + 12$
- not standard: $5x^6 + 2x^5 + 27$

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More Polynomials (page 101)

- | | |
|-------------------------------------|---------------------------------------|
| 1. $5x^3 + 2x^2 + 13$
Trinomial | 2. $6z$
Monomial |
| 3. $3b + 7$
Binomial | 4. z
Monomial |
| 5. $z^2 + 6$
Binomial | 6. $2a^3 + 11a$
Binomial |
| 7. $3x^3 + 4x^2$
Binomial | 8. $22y^3 + 30y^2$
Binomial |
| 9. $11x + 6$
Binomial | 10. $-20y^3 - 30y^2 + 8$
Trinomial |
| 11. $9x^3 + 2x^2 + 14$
Trinomial | 12. $18a^3 + 12a + 10$
Trinomial |
| 13. $5x^3 + 4x^2$
Binomial | 14. $29y^4 + 48y^3$
Binomial |
| 15. $x^2 + 9x + 16$
Trinomial | 16. $-40x^2 - 60y^2 + 4$
Trinomial |

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Activity 71

- 13 57 44
- 42 8 310
- $x = 3$ $y = 8$ $f = 10$
- $z = 7$ $w = 296$ $g = 3$
- $a = 5$ $b = 18$ $h = 87.5$
- $c = 7$ $d = 48$ $a = 2$
- Possible answer: 102
1. Parentheses 2. Exponents
3. Multiplication, then division from left to right. 4. Addition and subtraction from left to right.
- 34
- $f \leq 350$

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