

Lessons 5.1-5.2
Quiz - Form A

Unit 5

Multiply:

1. $(4x - 3)(2x + 5)$
2. $(x - 7)(2x + 8)$
3. $(x - 3)(2x^2 - 3x + 5)$
4. $(x + 2)^2$
5. $(2x - 3)^2$

Factor:

6. $x^2 + 7x + 12$
7. $x^2 - 6x + 8$
8. $x^2 - 2x - 24$
9. $m^2 + 6m - 16$
10. $a^4 + 3a^2 - 88$

Lessons 5.1-5.2
Quiz - Form B

Unit 5

Multiply:

1. $(3x + 6)(5x - 4)$

2. $(y - 8)(2y + 7)$

3. $(t - 2)(3t^2 - 6t + 8)$

4. $(x - 3)^2$

5. $(3x + 2)^2$

Factor:

6. $x^2 - x + 12$

7. $x^2 - 10x + 25$

8. $g^2 - 11g - 60$

9. $m^2 + 8m - 33$

10. $r^4 - 5r^2 - 36$

Lessons 5.3-5.4
Quiz - Form A

Unit 5

Factor:

1. $6x^2 - 8x + 2$
2. $4x^2 + 2x - 20$
3. $20x^2 + 26x + 8$
4. $x^2 - 36$
5. $16x^2 - 81$
6. $x^2 - 10x + 25$
7. $4x^2 + 12x + 9$
8. $12a^2 - 3r^2$
9. $20m^2 + 45mt + 25t^2$
10. $36x^3 - 16xy^2$

Lessons 5.3-5.4
Quiz - Form B

Unit 5

Factor:

1. $4x^2 + 14x + 12$
2. $6x^2 - 16x + 8$
3. $12x^2 - x - 20$
4. $x^2 - 49$
5. $25x^2 - 64$
6. $x^2 + 12x + 36$
7. $9x^2 - 24x + 16$
8. $50m^2 - 2t^2$
9. $18x^2 - 27xy - 45y^2$
10. $125a^3 - 80ab^2$

Lesson 5.5
Quiz - Form A

Unit 5

Factor:

1. $6x^3 - 6x$
2. $3a^2 + 27a + 42$
3. $12y^3 + 44y^2 + 40y$
4. $27x^3 - 75xy^2$
5. $2x^3 + 32x^2y - 160xy^2$

Lesson 5.5
Quiz - Form B

Unit 5

Factor:

1. $3x^2 + 9x + 6$

2. $16x^2y + 44xy + 30y$

3. $49x^2 - 36b^2$

4. $6x^2 - xy - 12y^2$

5. $a^4c - 8a^2b^2c + 16b^4c$

Lessons 5.6-5.7
Quiz - Form A

Unit 5

Factor:

1. $3x - 3y + xg - yg$
2. $y^2m + y^2b - 25m - 25b$

Solve for x:

3. $x^2 - x - 20 = 0$
4. $x^2 - 12x - 64 = 0$
5. $4x^2 + 9x + 5 = 0$

Write an equation; then solve each problem:

6. The sum of a number and eight is 15. Find the number.
7. Four times a number, decreased by 2 is the same as twice the number increased by 6. Find the number.

Lessons 5.6-5.7
Quiz - Form B

Unit 5

Factor:

1. $xy + 8y + xc + 8c$

2. $d^2 + 4d - ad - 4a$

Solve for x:

3. $x^2 - 2x - 24 = 0$

4. $x^2 + 7x - 44 = 0$

5. $6x^2 - 13x - 15 = 0$

Write an equation; then solve each problem:

6. Three times a number, decreased by 1 is the same as twice the number, increased by 2.

7. Four less than eight times a number is the number increased by 10. Find the number.

Lesson 5.8
Quiz - Form A

Unit 5

Write an equation and solve each problem:

1. Find three consecutive integers whose sum is 90.
2. Find two consecutive odd integers in which the square of the second, decreased by twice the first is 39.
3. Find three consecutive even integers such that the product of the first and second is four less than seven times the third.
4. Find three consecutive odd integers such that the product of the first and second is four less than seven times the third.
5. Find three consecutive integers such that the difference of the squares of the first and third is eight.

Write an equation and solve each problem:

1. Find three consecutive even integers whose sum is 234.
2. Find two consecutive odd integers such that the sum of the squares is 74.
3. Find three consecutive integers such that the product of the first and second, decreased by the square of the third is 14.
4. Find three consecutive odd integers such that the product of the first and third is three more than two times the first.
5. Find three consecutive integers such that the difference of the squares of the first and third is twelve.

Multiply:

1. $(2x + 5)(2x - 5)$
2. $(3b + 5c)(4b - c)$
3. $(3a + 1)(a^2 - 2a + 5)$
4. $(5n - 3)^2$

Factor each polynomial completely:

5. $b^2 + b - 20$
6. $2x^2 + 7x + 3$
7. $4p^2 - 4p - 3$
8. $4m^2 - 25$
9. $2a^3 - 2a^2 - 4a$
10. $225e^4 - 196e^2$
11. $3r^2 - 5rs - 2s^2$
12. $10c^3d^2 - 6c^2d^3 - 4cd^4$
13. $-bx - by + mx + my$
14. $8f^2 + 6fg - 21gx - 28fx$

Solve each equation:

15. $x^2 - 6x + 8 = 0$

16. $y^2 + 4y - 5 = 0$

17. $a^3 - 16a = 0$

18. $4b^3 - 2b^2 - 42b = 0$

19. $17g = -g^2$

20. $b^2 = 36$

21. $15x^2 = 34x + 77$

22. $(2x - 1)(x + 4) = x^2 + x - 13$

Write an equation and solve each problem:

23. Find two consecutive integers whose sum is 35.

24. Find two consecutive even integers whose product is 24.

25. Find three consecutive integers such that the sum of the last two is the same as three times the first.

Multiply:

1. $(3x + 4)(3x - 4)$
2. $(b + 2c)(2b - 7c)$
3. $(4a + 3)(a^2 - 5a + 9)$
4. $(7n + 4)^2$

Factor each polynomial completely:

5. $m^2 - 9m + 18$
6. $3a^2 + 5a - 2$
7. $8r^2 - 14r + 5$
8. $289 - 49b^2$
9. $3p^3 - 21p^2 + 36p$
10. $2x^6 - 578x^2$
11. $t^2 - 16w^2$
12. $3e^3f + 10e^2f^2 - 8ef^3$
13. $-d - e + 2cd + 2ce$
14. $x^2 + ax + 3at + 3xt$

Solve each equation:

15. $3m^2 + 11m - 4 = 0$

16. $4n^2 - 4n - 3 = 0$

17. $b^4 - b^2 = 0$

18. $6a^5 - 13a^4 + 6a^3 = 0$

19. $g^2 - 3g = 10$

20. $4b^2 = 196$

21. $-3m = -4m^2 + 27$

22. $(x - 5)(x + 5) = 2x^2 - 34$

Write an equation and solve each problem:

23. Fifteen less than 8 times a number is the same as the square of the number. Find the number.

24. Find three consecutive even integers whose sum is 36.

25. Find two consecutive even integers whose product is 48.