

Multiplying and Factoring Assignment

Find the product of the following Polynomials

1. $9x(8xy)$

2. $2mo(10mn)$

3. $6xz(15yz^2)$

4. $17xy(xy^2z)$

5. $3x(12x + y)$

6. $2x(3 + 14y)$

7. $3ab(10a + 20b - 4)$

8. $10bc(5a + 6b - 2c)$

9. $6(a + 2b - 3c + 4d)$

10. $15x(3x + 2y + 5z - 9)$

Name: _____ Period: _____ Date: _____

Multiplying and Factoring Assignment

Factor the Following Polynomials

11. $45x + 30$

12. $16x + 20y - 24$

13. $9a - 6b + 3$

14. $40x - 20xy$

15. $13x - 26xy + 39xz$

16. $26x^2 + 14x$

17. $24a^2 - 36ab - 72a$

18. $25vuz - 50u^2z - 100uz$

19. $42abc - 50bc + 30bcd$

20. $75g + 150gh - 225gi$

Multiplying and Factoring Assignment

Answer:

Find the product of the following Polynomials

1. $9x(8xy) = 72x^2y$

2. $2mo(10mn) = 20m^2no$

3. $6xz(15yz^2) = 90xyz^3$

4. $17xy(xy^2z) = 17x^2y^3z$

5. $3x(12x + y) = 36x^2 + 3xy$

6. $2x(3 + 14y) = 6x + 28xy$

7. $3ab(10a + 20b - 4) = 30a^2b + 60ab^2 - 12ab$

8. $10bc(5a + 6b - 2c) = 50abc + 60b^2c - 20bc^2$

9. $6(a + 2b - 3c + 4d) = 6a + 12b - 18c + 24d$

10. $15x(3x + 2y + 5z - 9) = 45x^2 + 30xy + 75xz - 135x$

Factor the Following Polynomials

11. $45x + 30 = 15(3x + 2)$

12. $16x + 20y - 24 = 4(4x + 5y - 6)$

13. $9a - 6b + 3 = 3(3a - 2b + 1)$

14. $40x - 20xy = 20x(2 - y)$

15. $13x - 26xy + 39xz = 13x(1 - 2y + 3z)$

16. $26x^2 + 14x = 2x(13x + 7)$

17. $24a^2 - 36ab - 72a = 12a(2a - 3b - 6)$

18. $25vuz - 50u^2z - 100uz = 25uz(v - 2u - 4)$

19. $42abc - 50bc + 30bcd = 2bc(21a - 25 + 15d)$

20. $75g + 150gh - 225gi = 75g(1 + 2h - 3i)$