Multiplication de Trois Trinômes (C)

Simplifiez chaque expression.

1. $(5z^3 - 2z^2 - 7z)(7z^3 + 6z^2 - 3z)(-9z^4 - 7z^3 - z^2)$

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

3. $(4y^4 - 4y^3 + 5y^2)(-3y^5 + 2y^4 + 6y^3)(-7y^4 - 7y^3 - 6y^2)$

4. $(-8z^3 + 4z^2 - 5z)(-z^2 + 3z + 4)(-2z^2 - 4z + 3)$

5. $(8a^3 - 4a^2 - 4a)(-6a^5 + 3a^4 - 6a^3)(-4a^3 + 9a^2 + 4a)$

6. $(9s^4 + 9s^3 - 8s^2)(-3s^3 + s^2 + 5s)(7s^2 + 3s + 4)$

7. $(-t^5 - 4t^4 - 6t^3)(-5t^5 - 9t^4 + 7t^3)(3t^4 - 3t^3 - 3t^2)$

8. $(-n^4 - 4n^3 - 3n^2)(7n^4 - n^3 - 4n^2)(8n^5 + 6n^4 - 8n^3)$

9. $(2q^4 - 6q^3 - 6q^2)(5q^3 - 6q^2 + 8q)(-3q^3 - 3q^2 - q)$

10. $(-y^3 + 7y^2 + y)(-9y^4 + 5y^3 - 8y^2)(-y^5 + 2y^4 - 5y^3)$

Multiplication de Trois Trinômes (C) Réponses

Simplifiez chaque expression.

1. $(5z^3 - 2z^2 - 7z)(7z^3 + 6z^2 - 3z)(-9z^4 - 7z^3 - z^2)$
   $= -315z^{10} - 389z^9 + 537z^8 + 840z^7 + 139z^6 - 111z^5 - 21z^4$

2. $(-7t^3 - t^2 + 8t)(3t^2 - 4t + 1)(8t^5 + 8t^4 + 2t^3)$
   $= -168t^{10} + 32t^9 + 326t^8 - 46t^7 - 158t^6 - 2t^5 + 16t^4$

3. $(4y^4 - 4y^3 + 5y^2)(-3y^5 + 2y^4 + 6y^3)(-7y^4 - 7y^3 - 6y^2)$
   $= 84y^{13} - 56y^{12} - 75y^{11} - 29y^{10} - 118y^9 - 126y^8 - 180y^7$

4. $(-8z^3 + 4z^2 - 5z)(-z^2 + 3z + 4)(-2z^2 - 4z + 3)$
   $= -16z^7 + 24z^6 + 166z^5 - 26z^4 - 9z^3 + 83z^2 - 60z$

5. $(8a^3 - 4a^2 - 4a)(-6a^5 + 3a^4 - 6a^3)(-4a^3 + 9a^2 + 4a)$
   $= 192a^{11} - 624a^{10} + 384a^9 - 180a^8 - 132a^7 + 264a^6 + 96a^5$

6. $(9s^4 + 9s^3 - 8s^2)(-3s^3 + s^2 + 5s)(7s^2 + 3s + 4)$
   $= -189s^9 - 207s^8 + 384s^7 + 421s^6 + 143s^5 + 28s^4 - 160s^3$

7. $(-t^5 - 4t^4 - 6t^3)(-5t^5 - 9t^4 + 7t^3)(3t^4 - 3t^3 - 3t^2)$
   $= 15t^{14} + 72t^{13} + 75t^{12} - 186t^{11} - 381t^{10} + 48t^9 + 126t^8$

8. $(-n^4 - 4n^3 - 3n^2)(7n^4 - n^3 - 4n^2)(8n^5 + 6n^4 - 8n^3)$
   $= -56n^{13} - 258n^{12} - 210n^{11} + 290n^{10} + 314n^9 - 80n^8 - 96n^7$

9. $(2q^4 - 6q^3 - 6q^2)(5q^3 - 6q^2 + 8q)(-3q^3 - 3q^2 - q)$
   $= -30q^{10} + 96q^9 + 50q^8 + 12q^7 + 158q^6 + 156q^5 + 48q^4$

10. $(-y^3 + 7y^2 + y)(-9y^4 + 5y^3 - 8y^2)(-y^5 + 2y^4 - 5y^3)$
    $= -9y^{12} + 86y^{11} - 215y^{10} + 459y^9 - 264y^8 + 239y^7 + 40y^6$