

# Multiplication de Deux Binômes par un Trinôme (F)

Simplifiez chaque expression.

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

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

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

4.  $(-3w^5 - 4w^4)(-4w^3 - w^2)(5w^2 - 4w + 3)$

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

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

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

8.  $(-6d^4 - d^3)(6d + 6)(8d^4 - 3d^3 - 4d^2)$

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

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

# Multiplication de Deux Binômes par un Trinôme (F)

## Réponses

Simplifiez chaque expression.

$$1. (-2k^2 - 6k)(-5k^4 - 3k^3)(-2k^2 + 3k + 9) \\ = -20k^8 - 42k^7 + 162k^6 + 378k^5 + 162k^4$$

$$2. (s^5 + 6s^4)(-4s^2 - 3s)(-7s^4 + 4s^3 + 5s^2) \\ = 28s^{11} + 173s^{10} - 2s^9 - 207s^8 - 90s^7$$

$$3. (9z^4 + 2z^3)(-6z^5 + 3z^4)(3z^4 - 7z^3 + 2z^2) \\ = -162z^{13} + 423z^{12} - 195z^{11} - 12z^{10} + 12z^9$$

$$4. (-3w^5 - 4w^4)(-4w^3 - w^2)(5w^2 - 4w + 3) \\ = 60w^{10} + 47w^9 - 20w^8 + 41w^7 + 12w^6$$

$$5. (-7v^4 - 3v^3)(9v^2 + 5v)(-8v^4 - 6v^3 + v^2) \\ = 504v^{10} + 874v^9 + 429v^8 + 28v^7 - 15v^6$$

$$6. (8f^4 + 9f^3)(-2f^5 + 9f^4)(-9f^3 + 4f^2 + 6f) \\ = 144f^{12} - 550f^{11} - 609f^{10} + 648f^9 + 486f^8$$

$$7. (6d^4 + 3d^3)(7d^4 + 3d^3)(-6d^4 + 5d^3 + 7d^2) \\ = -252d^{12} - 24d^{11} + 435d^{10} + 318d^9 + 63d^8$$

$$8. (-6d^4 - d^3)(6d + 6)(8d^4 - 3d^3 - 4d^2) \\ = -288d^9 - 228d^8 + 222d^7 + 186d^6 + 24d^5$$

$$9. (2a^4 - 4a^3)(-3a^2 + 9a)(-6a^2 - 7a - 4) \\ = 36a^8 - 138a^7 + 30a^6 + 132a^5 + 144a^4$$

$$10. (-z^2 + z)(-z^4 + 8z^3)(8z^3 - 8z^2 - 5z) \\ = 8z^9 - 80z^8 + 131z^7 - 19z^6 - 40z^5$$