

## Multiplication de Trois Trinômes (B)

Simplifiez chaque expression.

$$1. (v^2 + 2v + 2)(v^2 - 9v - 6)(-9v^2 - 8v - 4)$$

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

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

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

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

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

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

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

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

$$10. (-9m^5 + 6m^4 - 2m^3)(-3m^4 - 2m^3 - 2m^2)(-9m^5 + 6m^4 - 7m^3)$$

## Multiplication de Trois Trinômes (B) Réponses

Simplifiez chaque expression.

$$1. (v^2 + 2v + 2)(v^2 - 9v - 6)(-9v^2 - 8v - 4)$$
$$= -9v^6 + 55v^5 + 250v^4 + 474v^3 + 436v^2 + 216v + 48$$

$$2. (3x^4 + 3x^3 + 2x^2)(5x^2 + 4x - 2)(-5x^4 + 4x^3 + 6x^2)$$
$$= -75x^{10} - 75x^9 + 118x^8 + 216x^7 + 124x^6 - 4x^5 - 24x^4$$

$$3. (5p^3 - 6p^2 + 7p)(7p^4 - p^3 + 6p^2)(6p^2 + 7p + 7)$$
$$= 210p^9 - 37p^8 + 426p^7 + 8p^6 + 546p^5 - 7p^4 + 294p^3$$

$$4. (-3z^4 - 3z^3 - 3z^2)(6z^2 - 6z + 3)(-2z^5 - 9z^4 + 5z^3)$$
$$= 36z^{11} + 162z^{10} - 72z^9 + 63z^8 - 108z^7 + 126z^6 - 45z^5$$

$$5. (3t^2 + 8t + 2)(9t^4 + 9t^3 + 2t^2)(2t^2 - 9t + 5)$$
$$= 54t^8 - 45t^7 - 564t^6 - 301t^5 + 182t^4 + 134t^3 + 20t^2$$

$$6. (4r^5 + 8r^4 - 2r^3)(-5r^3 - r^2 - 4r)(-6r^5 + 9r^4 - 8r^3)$$
$$= 120r^{13} + 84r^{12} - 152r^{11} + 406r^{10} - 206r^9 + 312r^8 - 64r^7$$

$$7. (7m^4 + 8m^3 - 2m^2)(5m^2 - 7m + 3)(3m^4 - 5m^3 - 6m^2)$$
$$= 105m^{10} - 202m^9 - 300m^8 + 393m^7 + 62m^6 - 198m^5 + 36m^4$$

$$8. (6a^3 + 9a^2 + 6a)(a^3 + a^2 - 9a)(a^5 + 8a^4 + 9a^3)$$
$$= 6a^{11} + 63a^{10} + 135a^9 - 252a^8 - 1005a^7 - 1107a^6 - 486a^5$$

$$9. (4w^5 - 9w^4 - 7w^3)(-4w^5 + 6w^4 - 2w^3)(-7w^5 - 6w^4 - 3w^3)$$
$$= 112w^{15} - 324w^{14} - 74w^{13} + 192w^{12} + 148w^{11} - 12w^{10} - 42w^9$$

$$10. (-9m^5 + 6m^4 - 2m^3)(-3m^4 - 2m^3 - 2m^2)(-9m^5 + 6m^4 - 7m^3)$$
$$= -243m^{14} + 162m^{13} - 297m^{12} + 144m^{11} - 168m^{10} + 80m^9 - 28m^8$$