

Multiplication d'un Monôme par un Binôme (A)

Simplifiez chaque expression.

1. $-7k^4(-9k^3 - 8k^2)$

2. $6x^3(9x - 4)$

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

4. $-2k^4(7k^3 - 5k^2)$

5. $-3r^2(5r^4 - 5r^3)$

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

7. $3b^2(-6b^2 - 7b)$

8. $-s^2(7s - 9)$

9. $6n(6n - 8)$

10. $5x^2(-8x^2 + 7x)$

Multiplication d'un Monôme par un Binôme (A) Réponses

Simplifiez chaque expression.

$$\begin{aligned} 1. & -7k^4(-9k^3 - 8k^2) \\ & = 63k^7 + 56k^6 \end{aligned}$$

$$\begin{aligned} 2. & 6x^3(9x - 4) \\ & = 54x^4 - 24x^3 \end{aligned}$$

$$\begin{aligned} 3. & -2c^5(-7c^4 + c^3) \\ & = 14c^9 - 2c^8 \end{aligned}$$

$$\begin{aligned} 4. & -2k^4(7k^3 - 5k^2) \\ & = -14k^7 + 10k^6 \end{aligned}$$

$$\begin{aligned} 5. & -3r^2(5r^4 - 5r^3) \\ & = -15r^6 + 15r^5 \end{aligned}$$

$$\begin{aligned} 6. & -9k^4(4k^2 + 9k) \\ & = -36k^6 - 81k^5 \end{aligned}$$

$$\begin{aligned} 7. & 3b^2(-6b^2 - 7b) \\ & = -18b^4 - 21b^3 \end{aligned}$$

$$\begin{aligned} 8. & -s^2(7s - 9) \\ & = -7s^3 + 9s^2 \end{aligned}$$

$$\begin{aligned} 9. & 6n(6n - 8) \\ & = 36n^2 - 48n \end{aligned}$$

$$\begin{aligned} 10. & 5x^2(-8x^2 + 7x) \\ & = -40x^4 + 35x^3 \end{aligned}$$

Multiplication d'un Monôme par un Binôme (B)

Simplifiez chaque expression.

1. $3c^5(-5c^4 + 3c^3)$

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

3. $-8w^3(3w^3 - 6w^2)$

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

5. $-7t^4(3t - 3)$

6. $-5c^3(3c^5 - 8c^4)$

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

8. $-9g(-3g + 4)$

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

10. $9m(5m^3 + m^2)$

Multiplication d'un Monôme par un Binôme (B) Réponses

Simplifiez chaque expression.

$$1. 3c^5(-5c^4 + 3c^3) \\ = -15c^9 + 9c^8$$

$$2. 7t^5(-t^5 + t^4) \\ = -7t^{10} + 7t^9$$

$$3. -8w^3(3w^3 - 6w^2) \\ = -24w^6 + 48w^5$$

$$4. -5f^4(8f^2 + 8f) \\ = -40f^6 - 40f^5$$

$$5. -7t^4(3t - 3) \\ = -21t^5 + 21t^4$$

$$6. -5c^3(3c^5 - 8c^4) \\ = -15c^8 + 40c^7$$

$$7. d^4(3d^3 - 6d^2) \\ = 3d^7 - 6d^6$$

$$8. -9g(-3g + 4) \\ = 27g^2 - 36g$$

$$9. 6k^4(-6k^4 + 3k^3) \\ = -36k^8 + 18k^7$$

$$10. 9m(5m^3 + m^2) \\ = 45m^4 + 9m^3$$

Multiplication d'un Monôme par un Binôme (C)

Simplifiez chaque expression.

1. $-3v^5(3v^2 + 4v)$

2. $-7s^2(-4s - 4)$

3. $4y(-6y^4 + 4y^3)$

4. $-2x^5(9x^4 - 4x^3)$

5. $-9h(h^3 + 7h^2)$

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

7. $-5f^4(-9f^5 - 7f^4)$

8. $-2r(2r^2 + 5r)$

9. $5c^4(8c^4 + c^3)$

10. $4r^2(-9r^4 + 5r^3)$

Multiplication d'un Monôme par un Binôme (C) Réponses

Simplifiez chaque expression.

$$\begin{aligned} 1. & -3v^5(3v^2 + 4v) \\ & = -9v^7 - 12v^6 \end{aligned}$$

$$\begin{aligned} 2. & -7s^2(-4s - 4) \\ & = 28s^3 + 28s^2 \end{aligned}$$

$$\begin{aligned} 3. & 4y(-6y^4 + 4y^3) \\ & = -24y^5 + 16y^4 \end{aligned}$$

$$\begin{aligned} 4. & -2x^5(9x^4 - 4x^3) \\ & = -18x^9 + 8x^8 \end{aligned}$$

$$\begin{aligned} 5. & -9h(h^3 + 7h^2) \\ & = -9h^4 - 63h^3 \end{aligned}$$

$$\begin{aligned} 6. & 6s^3(-9s^5 + 2s^4) \\ & = -54s^8 + 12s^7 \end{aligned}$$

$$\begin{aligned} 7. & -5f^4(-9f^5 - 7f^4) \\ & = 45f^9 + 35f^8 \end{aligned}$$

$$\begin{aligned} 8. & -2r(2r^2 + 5r) \\ & = -4r^3 - 10r^2 \end{aligned}$$

$$\begin{aligned} 9. & 5c^4(8c^4 + c^3) \\ & = 40c^8 + 5c^7 \end{aligned}$$

$$\begin{aligned} 10. & 4r^2(-9r^4 + 5r^3) \\ & = -36r^6 + 20r^5 \end{aligned}$$

Multiplication d'un Monôme par un Binôme (D)

Simplifiez chaque expression.

1. $5r^3(4r^5 - 6r^4)$

2. $9r(5r^5 + 5r^4)$

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

4. $-6v^2(-5v - 7)$

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

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

7. $4r^5(4r^5 + 3r^4)$

8. $8s^4(8s^3 - 3s^2)$

9. $f^3(9f - 9)$

10. $6w^2(8w^3 + 4w^2)$

Multiplication d'un Monôme par un Binôme (D) Réponses

Simplifiez chaque expression.

$$1. 5r^3(4r^5 - 6r^4) \\ = 20r^8 - 30r^7$$

$$2. 9r(5r^5 + 5r^4) \\ = 45r^6 + 45r^5$$

$$3. 9s^2(-7s^5 + 7s^4) \\ = -63s^7 + 63s^6$$

$$4. -6v^2(-5v - 7) \\ = 30v^3 + 42v^2$$

$$5. -x^2(4x^5 + 4x^4) \\ = -4x^7 - 4x^6$$

$$6. 9k^4(5k^2 + 3k) \\ = 45k^6 + 27k^5$$

$$7. 4r^5(4r^5 + 3r^4) \\ = 16r^{10} + 12r^9$$

$$8. 8s^4(8s^3 - 3s^2) \\ = 64s^7 - 24s^6$$

$$9. f^3(9f - 9) \\ = 9f^4 - 9f^3$$

$$10. 6w^2(8w^3 + 4w^2) \\ = 48w^5 + 24w^4$$

Multiplication d'un Monôme par un Binôme (E)

Simplifiez chaque expression.

1. $-3v(-3v^3 - 6v^2)$

2. $2y^5(8y^3 - 6y^2)$

3. $-9g(g^3 + 9g^2)$

4. $-3c^5(3c^5 + 6c^4)$

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

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

7. $6y^5(3y^4 + 8y^3)$

8. $-3m(-7m^4 + 9m^3)$

9. $6b^3(-b^5 - 4b^4)$

10. $-4r^4(5r - 5)$

Multiplication d'un Monôme par un Binôme (E) Réponses

Simplifiez chaque expression.

$$\begin{aligned} 1. & -3v(-3v^3 - 6v^2) \\ & = 9v^4 + 18v^3 \end{aligned}$$

$$\begin{aligned} 2. & 2y^5(8y^3 - 6y^2) \\ & = 16y^8 - 12y^7 \end{aligned}$$

$$\begin{aligned} 3. & -9g(g^3 + 9g^2) \\ & = -9g^4 - 81g^3 \end{aligned}$$

$$\begin{aligned} 4. & -3c^5(3c^5 + 6c^4) \\ & = -9c^{10} - 18c^9 \end{aligned}$$

$$\begin{aligned} 5. & -4z^2(z^4 + z^3) \\ & = -4z^6 - 4z^5 \end{aligned}$$

$$\begin{aligned} 6. & -7s^4(-2s^2 - 5s) \\ & = 14s^6 + 35s^5 \end{aligned}$$

$$\begin{aligned} 7. & 6y^5(3y^4 + 8y^3) \\ & = 18y^9 + 48y^8 \end{aligned}$$

$$\begin{aligned} 8. & -3m(-7m^4 + 9m^3) \\ & = 21m^5 - 27m^4 \end{aligned}$$

$$\begin{aligned} 9. & 6b^3(-b^5 - 4b^4) \\ & = -6b^8 - 24b^7 \end{aligned}$$

$$\begin{aligned} 10. & -4r^4(5r - 5) \\ & = -20r^5 + 20r^4 \end{aligned}$$

Multiplication d'un Monôme par un Binôme (F)

Simplifiez chaque expression.

1. $9v^4(9v^2 + v)$

2. $-8c^2(4c^3 + 3c^2)$

3. $9q^4(-8q^5 - 7q^4)$

4. $4g^4(-6g - 6)$

5. $-5t^3(-4t^5 - 7t^4)$

6. $6h^3(-6h + 4)$

7. $w^2(4w^2 + 5w)$

8. $-7k(-5k^3 + 3k^2)$

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

10. $-3n^2(8n - 5)$

Multiplication d'un Monôme par un Binôme (F) Réponses

Simplifiez chaque expression.

$$\begin{aligned} 1. & 9v^4(9v^2 + v) \\ & = 81v^6 + 9v^5 \end{aligned}$$

$$\begin{aligned} 2. & -8c^2(4c^3 + 3c^2) \\ & = -32c^5 - 24c^4 \end{aligned}$$

$$\begin{aligned} 3. & 9q^4(-8q^5 - 7q^4) \\ & = -72q^9 - 63q^8 \end{aligned}$$

$$\begin{aligned} 4. & 4g^4(-6g - 6) \\ & = -24g^5 - 24g^4 \end{aligned}$$

$$\begin{aligned} 5. & -5t^3(-4t^5 - 7t^4) \\ & = 20t^8 + 35t^7 \end{aligned}$$

$$\begin{aligned} 6. & 6h^3(-6h + 4) \\ & = -36h^4 + 24h^3 \end{aligned}$$

$$\begin{aligned} 7. & w^2(4w^2 + 5w) \\ & = 4w^4 + 5w^3 \end{aligned}$$

$$\begin{aligned} 8. & -7k(-5k^3 + 3k^2) \\ & = 35k^4 - 21k^3 \end{aligned}$$

$$\begin{aligned} 9. & 6f^4(6f^3 - 2f^2) \\ & = 36f^7 - 12f^6 \end{aligned}$$

$$\begin{aligned} 10. & -3n^2(8n - 5) \\ & = -24n^3 + 15n^2 \end{aligned}$$

Multiplication d'un Monôme par un Binôme (G)

Simplifiez chaque expression.

1. $2r(5r^4 + 8r^3)$

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

3. $-9b(7b^4 + b^3)$

4. $6a(-a^3 - 2a^2)$

5. $3s(3s + 2)$

6. $-d^5(-5d - 7)$

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

8. $8k^3(3k^4 - 4k^3)$

9. $-5c(-6c + 1)$

10. $-x^4(-4x^2 + 4x)$

Multiplication d'un Monôme par un Binôme (G) Réponses

Simplifiez chaque expression.

$$\begin{aligned} 1. & 2r(5r^4 + 8r^3) \\ & = 10r^5 + 16r^4 \end{aligned}$$

$$\begin{aligned} 2. & -9y^3(-y^4 + 7y^3) \\ & = 9y^7 - 63y^6 \end{aligned}$$

$$\begin{aligned} 3. & -9b(7b^4 + b^3) \\ & = -63b^5 - 9b^4 \end{aligned}$$

$$\begin{aligned} 4. & 6a(-a^3 - 2a^2) \\ & = -6a^4 - 12a^3 \end{aligned}$$

$$\begin{aligned} 5. & 3s(3s + 2) \\ & = 9s^2 + 6s \end{aligned}$$

$$\begin{aligned} 6. & -d^5(-5d - 7) \\ & = 5d^6 + 7d^5 \end{aligned}$$

$$\begin{aligned} 7. & -3r^2(5r^5 + 7r^4) \\ & = -15r^7 - 21r^6 \end{aligned}$$

$$\begin{aligned} 8. & 8k^3(3k^4 - 4k^3) \\ & = 24k^7 - 32k^6 \end{aligned}$$

$$\begin{aligned} 9. & -5c(-6c + 1) \\ & = 30c^2 - 5c \end{aligned}$$

$$\begin{aligned} 10. & -x^4(-4x^2 + 4x) \\ & = 4x^6 - 4x^5 \end{aligned}$$

Multiplication d'un Monôme par un Binôme (H)

Simplifiez chaque expression.

1. $-2f^3(-f^2 + 4f)$

2. $-8x^2(3x + 2)$

3. $4s(-7s^2 - 3s)$

4. $d^3(-d^3 - 9d^2)$

5. $-3c^5(-8c^5 - 2c^4)$

6. $4a^4(7a - 4)$

7. $2a^4(6a^5 + 9a^4)$

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

9. $-4s^2(-3s + 4)$

10. $-8a(3a^4 + 9a^3)$

Multiplication d'un Monôme par un Binôme (H) Réponses

Simplifiez chaque expression.

$$\begin{aligned} 1. & -2f^3(-f^2 + 4f) \\ & = 2f^5 - 8f^4 \end{aligned}$$

$$\begin{aligned} 2. & -8x^2(3x + 2) \\ & = -24x^3 - 16x^2 \end{aligned}$$

$$\begin{aligned} 3. & 4s(-7s^2 - 3s) \\ & = -28s^3 - 12s^2 \end{aligned}$$

$$\begin{aligned} 4. & d^3(-d^3 - 9d^2) \\ & = -d^6 - 9d^5 \end{aligned}$$

$$\begin{aligned} 5. & -3c^5(-8c^5 - 2c^4) \\ & = 24c^{10} + 6c^9 \end{aligned}$$

$$\begin{aligned} 6. & 4a^4(7a - 4) \\ & = 28a^5 - 16a^4 \end{aligned}$$

$$\begin{aligned} 7. & 2a^4(6a^5 + 9a^4) \\ & = 12a^9 + 18a^8 \end{aligned}$$

$$\begin{aligned} 8. & 8q^5(-3q^3 + 8q^2) \\ & = -24q^8 + 64q^7 \end{aligned}$$

$$\begin{aligned} 9. & -4s^2(-3s + 4) \\ & = 12s^3 - 16s^2 \end{aligned}$$

$$\begin{aligned} 10. & -8a(3a^4 + 9a^3) \\ & = -24a^5 - 72a^4 \end{aligned}$$

Multiplication d'un Monôme par un Binôme (I)

Simplifiez chaque expression.

1. $4h^2(6h^3 + 8h^2)$

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

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

4. $4m(4m + 3)$

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

6. $9k^3(9k^2 + 7k)$

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

8. $8x^4(2x^2 + x)$

9. $4n^3(3n^4 + n^3)$

10. $6g^3(-5g^2 + 6g)$

Multiplication d'un Monôme par un Binôme (I) Réponses

Simplifiez chaque expression.

$$1. 4h^2(6h^3 + 8h^2) \\ = 24h^5 + 32h^4$$

$$2. 8s^5(s^4 + 7s^3) \\ = 8s^9 + 56s^8$$

$$3. -4z^5(7z + 3) \\ = -28z^6 - 12z^5$$

$$4. 4m(4m + 3) \\ = 16m^2 + 12m$$

$$5. 5k^2(-k^4 + 9k^3) \\ = -5k^6 + 45k^5$$

$$6. 9k^3(9k^2 + 7k) \\ = 81k^5 + 63k^4$$

$$7. 9z^2(5z^3 + 5z^2) \\ = 45z^5 + 45z^4$$

$$8. 8x^4(2x^2 + x) \\ = 16x^6 + 8x^5$$

$$9. 4n^3(3n^4 + n^3) \\ = 12n^7 + 4n^6$$

$$10. 6g^3(-5g^2 + 6g) \\ = -30g^5 + 36g^4$$

Multiplication d'un Monôme par un Binôme (J)

Simplifiez chaque expression.

1. $-3n^4(-2n^4 + 5n^3)$

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

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

4. $9g(2g^5 + 9g^4)$

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

6. $-2m(7m^3 - m^2)$

7. $-b^4(-8b^5 - 2b^4)$

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

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

10. $-8w(3w^5 - 6w^4)$

Multiplication d'un Monôme par un Binôme (J) Réponses

Simplifiez chaque expression.

$$1. -3n^4(-2n^4 + 5n^3) \\ = 6n^8 - 15n^7$$

$$2. 9f^5(5f^5 - 8f^4) \\ = 45f^{10} - 72f^9$$

$$3. f^2(-3f^5 + 4f^4) \\ = -3f^7 + 4f^6$$

$$4. 9g(2g^5 + 9g^4) \\ = 18g^6 + 81g^5$$

$$5. -3b^2(b^3 + 4b^2) \\ = -3b^5 - 12b^4$$

$$6. -2m(7m^3 - m^2) \\ = -14m^4 + 2m^3$$

$$7. -b^4(-8b^5 - 2b^4) \\ = 8b^9 + 2b^8$$

$$8. n^2(3n^5 - 9n^4) \\ = 3n^7 - 9n^6$$

$$9. 2q(4q^5 - 8q^4) \\ = 8q^6 - 16q^5$$

$$10. -8w(3w^5 - 6w^4) \\ = -24w^6 + 48w^5$$