

## Multiplicar Tres Polinomios (A)

Simplifique cada expresión.

1.  $(3t^3 - t^2 + 3t)(-t^2 - 7t - 8)(8t^4 + 6t^3 + 2t^2)$

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

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

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

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

## Multiplicar Tres Polinomios (A) Respuestas

Simplifique cada expresión.

$$\begin{aligned} 1. & (3t^3 - t^2 + 3t)(-t^2 - 7t - 8)(8t^4 + 6t^3 + 2t^2) \\ & = -24t^9 - 178t^8 - 286t^7 - 264t^6 - 310t^5 - 170t^4 - 48t^3 \end{aligned}$$

$$\begin{aligned} 2. & (7g^5 - 4g^4 + 6g^3)(6g^5 - 3g^4 - 7g^3)(2g^3 + 9g^2 + 5g) \\ & = 84g^{13} + 288g^{12} - 197g^{11} - 214g^{10} + 1g^9 - 328g^8 - 210g^7 \end{aligned}$$

$$\begin{aligned} 3. & (9a^4 + 7a^3 - 6a^2)(-a^3 + a^2 - 9a)(9a^5 + 9a^4 - 4a^3) \\ & = -81a^{12} - 63a^{11} - 558a^{10} - 1241a^9 + 137a^8 + 762a^7 - 216a^6 \end{aligned}$$

$$\begin{aligned} 4. & (-2z^4 - 9z^3 - z^2)(2z^4 + 2z^3 - 5z^2)(-5z^4 + z^3 + 5z^2) \\ & = 20z^{12} + 106z^{11} + 8z^{10} - 335z^9 - 32z^8 + 220z^7 + 25z^6 \end{aligned}$$

$$\begin{aligned} 5. & (6x^5 - 5x^4 - 2x^3)(-3x^4 - 8x^3 + 2x^2)(-3x^4 + 4x^3 - 4x^2) \\ & = 54x^{13} + 27x^{12} - 234x^{11} + 346x^{10} - 196x^9 - 40x^8 + 16x^7 \end{aligned}$$

## Multiplicar Tres Polinomios (B)

Simplifique cada expresión.

1.  $(-6v^2 - 4v - 7)(-7v^3 + v^2 + 7v)(8v^3 + 3v^2 - 2v)$

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

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

4.  $(6w^2 + 4w + 2)(8w^4 - 5w^3 + 9w^2)(-6w^2 - 5w - 1)$

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

## Multiplicar Tres Polinomios (B) Respuestas

Simplifique cada expresión.

$$\begin{aligned} 1. & (-6v^2 - 4v - 7)(-7v^3 + v^2 + 7v)(8v^3 + 3v^2 - 2v) \\ & = 336v^8 + 302v^7 + 6v^6 - 315v^5 - 503v^4 - 77v^3 + 98v^2 \end{aligned}$$

$$\begin{aligned} 2. & (-3a^5 - 2a^4 + 4a^3)(-a^5 + 8a^4 - a^3)(5a^2 + 7a + 3) \\ & = 15a^{12} - 89a^{11} - 230a^{10} - 15a^9 + 167a^8 + 74a^7 - 12a^6 \end{aligned}$$

$$\begin{aligned} 3. & (-7m^2 + 7m - 9)(8m^3 - m^2 + 9m)(6m^5 - 5m^4 - 4m^3) \\ & = -336m^{10} + 658m^9 - 943m^8 + 890m^7 - 278m^6 + 117m^5 + 324m^4 \end{aligned}$$

$$\begin{aligned} 4. & (6w^2 + 4w + 2)(8w^4 - 5w^3 + 9w^2)(-6w^2 - 5w - 1) \\ & = -288w^8 - 252w^7 - 358w^6 - 408w^5 - 288w^4 - 116w^3 - 18w^2 \end{aligned}$$

$$\begin{aligned} 5. & (-4h^5 + 9h^4 - h^3)(h^5 - 6h^4 - 5h^3)(2h^4 - 3h^3 - 2h^2) \\ & = -8h^{14} + 78h^{13} - 161h^{12} - 39h^{11} + 197h^{10} + 63h^9 - 10h^8 \end{aligned}$$

## Multiplicar Tres Polinomios (C)

Simplifique cada expresión.

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

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

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

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

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

## Multiplicar Tres Polinomios (C) Respuestas

Simplifique cada expresión.

$$\begin{aligned} 1. & (-v^5 + 3v^4 + 5v^3)(-v^2 + 7v - 3)(-5v^5 - 2v^4 + 7v^3) \\ & = -5v^{12} + 48v^{11} - 68v^{10} - 238v^9 + 156v^8 + 212v^7 - 105v^6 \end{aligned}$$

$$\begin{aligned} 2. & (6g^5 + 5g^4 + 4g^3)(-4g^3 + 5g^2 - 3g)(2g^3 + g^2 - 6g) \\ & = -48g^{11} - 4g^{10} + 136g^9 - 59g^8 + 35g^7 - 42g^6 + 72g^5 \end{aligned}$$

$$\begin{aligned} 3. & (-9t^2 - 4t - 7)(-8t^5 + 6t^4 - t^3)(-9t^4 - t^3 + 7t^2) \\ & = -648t^{11} + 126t^{10} + 157t^9 + 147t^8 + 262t^7 - 273t^6 + 49t^5 \end{aligned}$$

$$\begin{aligned} 4. & (5c^5 - 7c^4 - 5c^3)(-4c^5 + 2c^4 - 7c^3)(-2c^5 + c^4 + 3c^3) \\ & = 40c^{15} - 96c^{14} + 36c^{13} + 7c^{12} - 118c^{11} + 152c^{10} + 105c^9 \end{aligned}$$

$$\begin{aligned} 5. & (-3t^2 + 6t - 7)(2t^2 + t + 9)(-5t^5 + 3t^4 + 4t^3) \\ & = 30t^9 - 63t^8 + 178t^7 - 304t^6 + 316t^5 - 1t^4 - 252t^3 \end{aligned}$$

## Multiplicar Tres Polinomios (D)

Simplifique cada expresión.

1.  $(3z^3 - 7z^2 - 7z)(-5z^5 + 8z^4 + 2z^3)(2z^5 + z^4 + 9z^3)$

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

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

4.  $(-5w^2 + 7w + 1)(6w^2 - 5w + 8)(8w^3 + 6w^2 + w)$

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

## Multiplicar Tres Polinomios (D) Respuestas

Simplifique cada expresión.

$$\begin{aligned} 1. & (3z^3 - 7z^2 - 7z)(-5z^5 + 8z^4 + 2z^3)(2z^5 + z^4 + 9z^3) \\ & = -30z^{13} + 103z^{12} - 106z^{11} + 376z^{10} - 233z^9 - 644z^8 - 126z^7 \end{aligned}$$

$$\begin{aligned} 2. & (3q^3 + 7q^2 + q)(3q^3 - 5q^2 + 3q)(q^4 - 5q^3 - 4q^2) \\ & = 9q^{10} - 39q^9 - 89q^8 + 107q^7 + 15q^6 - 79q^5 - 12q^4 \end{aligned}$$

$$\begin{aligned} 3. & (4n^5 + 3n^4 - 8n^3)(8n^2 + 8n - 9)(-3n^2 - 2n + 6) \\ & = -96n^9 - 232n^8 + 308n^7 + 761n^6 - 490n^5 - 690n^4 + 432n^3 \end{aligned}$$

$$\begin{aligned} 4. & (-5w^2 + 7w + 1)(6w^2 - 5w + 8)(8w^3 + 6w^2 + w) \\ & = -240w^7 + 356w^6 - 180w^5 + 61w^4 + 301w^3 + 99w^2 + 8w \end{aligned}$$

$$\begin{aligned} 5. & (-5f^3 + 4f^2 + 3f)(6f^5 - 6f^4 + 8f^3)(7f^3 + 3f^2 - 5f) \\ & = -210f^{11} + 288f^{10} - 10f^9 - 310f^8 + 440f^7 + 2f^6 - 120f^5 \end{aligned}$$



## Multiplicar Tres Polinomios (E)

Simplifique cada expresión.

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

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

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

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

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

## Multiplicar Tres Polinomios (E) Respuestas

Simplifique cada expresión.

$$\begin{aligned} 1. & (2k^2 + 3k - 4)(-7k^2 + 3k + 2)(k^4 + 9k^3 + 9k^2) \\ & = -14k^8 - 141k^7 - 220k^6 + 228k^5 + 307k^4 - 126k^3 - 72k^2 \end{aligned}$$

$$\begin{aligned} 2. & (9t^3 - 5t^2 + 9t)(5t^2 + 2t + 6)(8t^5 + 6t^4 + 2t^3) \\ & = 360t^{10} + 214t^9 + 760t^8 + 424t^7 + 538t^6 + 300t^5 + 108t^4 \end{aligned}$$

$$\begin{aligned} 3. & (9n^4 - 3n^3 + 4n^2)(-6n^3 + 4n^2 - 9n)(n^4 + 4n^3 + n^2) \\ & = -54n^{11} - 162n^{10} + 45n^9 - 371n^8 + 19n^7 - 101n^6 - 36n^5 \end{aligned}$$

$$\begin{aligned} 4. & (8x^3 + 2x^2 + 8x)(-2x^5 - 7x^4 + 9x^3)(3x^5 - 6x^4 + x^3) \\ & = -48x^{13} - 84x^{12} + 470x^{11} - 426x^{10} + 486x^9 - 470x^8 + 72x^7 \end{aligned}$$

$$\begin{aligned} 5. & (8y^2 - 2y - 1)(5y^2 - 7y + 3)(4y^2 + y - 3) \\ & = 160y^6 - 224y^5 - 54y^4 + 235y^3 - 110y^2 - 6y + 9 \end{aligned}$$

# Multiplicar Tres Polinomios (F)

Simplifique cada expresión.

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

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

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

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

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

## Multiplicar Tres Polinomios (F) Respuestas

Simplifique cada expresión.

- $$(8h^3 - 2h^2 - 7h)(-h^4 - 3h^3 + 7h^2)(-4h^2 + h + 3)$$
$$= 32h^9 + 80h^8 - 322h^7 - 25h^6 + 410h^5 - 28h^4 - 147h^3$$
- $$(k^4 + 6k^3 - 9k^2)(5k^3 - 9k^2 - 3k)(-6k^3 + k^2 + 8k)$$
$$= -30k^{10} - 121k^9 + 673k^8 - 312k^7 - 915k^6 + 531k^5 + 216k^4$$
- $$(-9b^3 - 8b^2 - 2b)(4b^2 + 9b - 6)(-6b^5 + 7b^4 - 2b^3)$$
$$= 216b^{10} + 426b^9 - 563b^8 - 136b^7 + 190b^6 + 24b^5 - 24b^4$$
- $$(8y^2 - 7y - 1)(4y^3 + 2y^2 - 5y)(5y^5 - 5y^4 + 7y^3)$$
$$= 160y^{10} - 220y^9 - 6y^8 + 371y^7 - 546y^6 + 206y^5 + 35y^4$$
- $$(s^4 + 8s^3 - 2s^2)(-5s^4 - s^3 - 9s^2)(8s^5 - 2s^4 - 9s^3)$$
$$= -40s^{13} - 318s^{12} + 71s^{11} - 177s^{10} + 347s^9 + 594s^8 - 162s^7$$

## Multiplicar Tres Polinomios (G)

Simplifique cada expresión.

1.  $(-4c^4 - c^3 - 8c^2)(9c^4 - 6c^3 + c^2)(-2c^4 + 7c^3 + 5c^2)$

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

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

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

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

## Multiplicar Tres Polinomios (G) Respuestas

Simplifique cada expresión.

$$\begin{aligned} 1. & (-4c^4 - c^3 - 8c^2)(9c^4 - 6c^3 + c^2)(-2c^4 + 7c^3 + 5c^2) \\ & = 72c^{12} - 282c^{11} + 65c^{10} - 509c^9 - 5c^8 + 179c^7 - 40c^6 \end{aligned}$$

$$\begin{aligned} 2. & (2c^5 + 6c^4 - c^3)(c^4 + 5c^3 - 4c^2)(-5c^4 + 2c^3 + 5c^2) \\ & = -10c^{13} - 76c^{12} - 63c^{11} + 267c^{10} + 27c^9 - 137c^8 + 20c^7 \end{aligned}$$

$$\begin{aligned} 3. & (9y^2 + 9y - 7)(-y^3 + 2y^2 + 2y)(-5y^4 - 9y^3 + y^2) \\ & = 45y^9 + 36y^8 - 305y^7 - 398y^6 + 77y^5 + 130y^4 - 14y^3 \end{aligned}$$

$$\begin{aligned} 4. & (8q^5 - 6q^4 + 6q^3)(-4q^3 + 4q^2 - 5q)(9q^3 + 5q^2 + 5q) \\ & = -288q^{11} + 344q^{10} - 672q^9 + 326q^8 - 440q^7 + 120q^6 - 150q^5 \end{aligned}$$

$$\begin{aligned} 5. & (-7c^5 - 6c^4 + 3c^3)(-c^4 + 4c^3 + 9c^2)(2c^4 - 6c^3 + 3c^2) \\ & = 14c^{13} - 86c^{12} - 27c^{11} + 390c^{10} + 36c^9 - 288c^8 + 81c^7 \end{aligned}$$

## Multiplicar Tres Polinomios (H)

Simplifique cada expresión.

1.  $(3v^5 + 5v^4 - 9v^3)(8v^3 + 3v^2 + 6v)(-5v^3 + 2v^2 - v)$

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

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

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

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

## Multiplicar Tres Polinomios (H) Respuestas

Simplifique cada expresión.

$$\begin{aligned} 1. & (3v^5 + 5v^4 - 9v^3)(8v^3 + 3v^2 + 6v)(-5v^3 + 2v^2 - v) \\ & = -120v^{11} - 197v^{10} + 269v^9 - 142v^8 + 315v^7 - 111v^6 + 54v^5 \end{aligned}$$

$$\begin{aligned} 2. & (-5v^5 - v^4 - 8v^3)(9v^3 + 5v^2 + 8v)(4v^4 - 6v^3 + 8v^2) \\ & = -180v^{12} + 134v^{11} - 624v^{10} + 238v^9 - 904v^8 - 512v^6 \end{aligned}$$

$$\begin{aligned} 3. & (-8q^2 - 2q - 7)(-5q^4 - 2q^3 + 5q^2)(-5q^4 + 9q^3 + 5q^2) \\ & = -200q^{10} + 230q^9 + 439q^8 + 101q^7 + 206q^6 - 295q^5 - 175q^4 \end{aligned}$$

$$\begin{aligned} 4. & (7y^5 + 2y^4 - 8y^3)(-6y^5 - 6y^4 + 3y^3)(5y^3 - 6y^2 + 3y) \\ & = -210y^{13} - 18y^{12} + 483y^{11} - 234y^{10} - 273y^9 + 306y^8 - 72y^7 \end{aligned}$$

$$\begin{aligned} 5. & (-4g^2 - 5g + 9)(-8g^5 + 8g^4 + g^3)(8g^5 + 5g^4 + 5g^3) \\ & = 256g^{12} + 224g^{11} - 728g^{10} - 4g^9 - 173g^8 + 380g^7 + 45g^6 \end{aligned}$$



## Multiplicar Tres Polinomios (I)

Simplifique cada expresión.

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

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

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

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

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

# Multiplicar Tres Polinomios (I) Respuestas

Simplifique cada expresión.

$$\begin{aligned} 1. & (6v^4 - 5v^3 + 4v^2)(5v^5 - 2v^4 - v^3)(-7v^2 + 4v + 2) \\ & = -210v^{11} + 379v^{10} - 256v^9 + 43v^8 + 64v^7 - 22v^6 - 8v^5 \end{aligned}$$

$$\begin{aligned} 2. & (6w^5 - 6w^4 + 5w^3)(6w^4 - 3w^3 - 7w^2)(6w^3 + 6w^2 - 2w) \\ & = 216w^{12} - 108w^{11} - 360w^{10} + 306w^9 - 60w^8 - 264w^7 + 70w^6 \end{aligned}$$

$$\begin{aligned} 3. & (2x^4 - 6x^3 + x^2)(3x^5 + 6x^4 + 9x^3)(2x^5 + 3x^4 + 2x^3) \\ & = 12x^{14} + 6x^{13} - 36x^{12} - 153x^{11} - 156x^{10} - 69x^9 + 18x^8 \end{aligned}$$

$$\begin{aligned} 4. & (7a^4 + 9a^3 - 6a^2)(-5a^5 + 7a^4 - 8a^3)(-3a^4 - 6a^3 + 9a^2) \\ & = 105a^{13} + 198a^{12} - 450a^{11} + 156a^{10} + 873a^9 - 1314a^8 + 432a^7 \end{aligned}$$

$$\begin{aligned} 5. & (-2d^4 + 2d^3 - d^2)(-7d^3 + 4d^2 - 8d)(3d^2 - 6d - 6) \\ & = 42d^9 - 150d^8 + 141d^7 - 114d^6 - 42d^5 + 72d^4 - 48d^3 \end{aligned}$$

## Multiplicar Tres Polinomios (J)

Simplifique cada expresión.

1.  $(8t^4 + 8t^3 + 4t^2)(-t^4 - 8t^3 - 3t^2)(-6t^5 + 6t^4 + 6t^3)$

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

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

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

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

## Multiplicar Tres Polinomios (J) Respuestas

Simplifique cada expresión.

$$\begin{aligned} 1. & (8t^4 + 8t^3 + 4t^2)(-t^4 - 8t^3 - 3t^2)(-6t^5 + 6t^4 + 6t^3) \\ & = 48t^{13} + 384t^{12} + 72t^{11} - 648t^{10} - 816t^9 - 408t^8 - 72t^7 \end{aligned}$$

$$\begin{aligned} 2. & (9x^5 - 6x^4 - x^3)(8x^5 + 3x^4 + 5x^3)(-2x^2 - 3x + 5) \\ & = -144x^{12} - 174x^{11} + 385x^{10} - 96x^9 + 204x^8 - 150x^7 - 25x^6 \end{aligned}$$

$$\begin{aligned} 3. & (4r^3 + 6r^2 - r)(6r^2 - 3r + 6)(-4r^5 - r^4 - r^3) \\ & = -96r^{10} - 120r^9 - 48r^8 - 180r^7 - 15r^6 - 33r^5 + 6r^4 \end{aligned}$$

$$\begin{aligned} 4. & (6y^3 - 5y^2 + 2y)(-2y^5 + 6y^4 + y^3)(-2y^4 - y^3 + 6y^2) \\ & = 24y^{12} - 80y^{11} - 62y^{10} + 290y^9 - 179y^8 + 40y^7 + 12y^6 \end{aligned}$$

$$\begin{aligned} 5. & (7a^4 + 3a^3 + 8a^2)(8a^5 + a^4 + 4a^3)(-2a^5 - 9a^4 - a^3) \\ & = -112a^{14} - 566a^{13} - 525a^{12} - 926a^{11} - 339a^{10} - 308a^9 - 32a^8 \end{aligned}$$