

## Multiplying Two Binomials (A)

Simplify each expression.

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

2.  $(7k + 8)(-9k^2 - 5k)$

3.  $(5n^3 - 7n^2)(-2n - 1)$

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

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

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

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

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

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

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

## Multiplying Two Binomials (A) Answers

Simplify each expression.

$$\begin{aligned} 1. & (-7z^2 - 7z)(-z^4 + 2z^3) \\ & = 7z^6 - 7z^5 - 14z^4 \end{aligned}$$

$$\begin{aligned} 2. & (7k + 8)(-9k^2 - 5k) \\ & = -63k^3 - 107k^2 - 40k \end{aligned}$$

$$\begin{aligned} 3. & (5n^3 - 7n^2)(-2n - 1) \\ & = -10n^4 + 9n^3 + 7n^2 \end{aligned}$$

$$\begin{aligned} 4. & (9x + 7)(-5x^4 - x^3) \\ & = -45x^5 - 44x^4 - 7x^3 \end{aligned}$$

$$\begin{aligned} 5. & (8y^5 + 5y^4)(4y^4 + 8y^3) \\ & = 32y^9 + 84y^8 + 40y^7 \end{aligned}$$

$$\begin{aligned} 6. & (7a^4 - 3a^3)(9a^4 - 7a^3) \\ & = 63a^8 - 76a^7 + 21a^6 \end{aligned}$$

$$\begin{aligned} 7. & (-7t^4 + 9t^3)(7t^5 + 4t^4) \\ & = -49t^9 + 35t^8 + 36t^7 \end{aligned}$$

$$\begin{aligned} 8. & (-2b^3 - 7b^2)(-5b^5 - 2b^4) \\ & = 10b^8 + 39b^7 + 14b^6 \end{aligned}$$

$$\begin{aligned} 9. & (-7s^4 + 8s^3)(-2s^4 - 4s^3) \\ & = 14s^8 + 12s^7 - 32s^6 \end{aligned}$$

$$\begin{aligned} 10. & (-c^4 + 4c^3)(-5c^2 - 9c) \\ & = 5c^6 - 11c^5 - 36c^4 \end{aligned}$$

## Multiplying Two Binomials (B)

Simplify each expression.

1.  $(8n + 1)(5n^3 + n^2)$

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

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

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

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

6.  $(2y + 5)(7y - 1)$

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

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

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

10.  $(5d^5 - 8d^4)(-9d + 7)$

## Multiplying Two Binomials (B) Answers

Simplify each expression.

$$\begin{aligned} 1. & (8n + 1)(5n^3 + n^2) \\ & = 40n^4 + 13n^3 + n^2 \end{aligned}$$

$$\begin{aligned} 2. & (y + 4)(6y^5 - 9y^4) \\ & = 6y^6 + 15y^5 - 36y^4 \end{aligned}$$

$$\begin{aligned} 3. & (-4b^3 + 4b^2)(5b^3 - 7b^2) \\ & = -20b^6 + 48b^5 - 28b^4 \end{aligned}$$

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

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

$$\begin{aligned} 6. & (2y + 5)(7y - 1) \\ & = 14y^2 + 33y - 5 \end{aligned}$$

$$\begin{aligned} 7. & (-9m^4 + 6m^3)(-7m^4 + 9m^3) \\ & = 63m^8 - 123m^7 + 54m^6 \end{aligned}$$

$$\begin{aligned} 8. & (-4y^3 - 7y^2)(5y + 9) \\ & = -20y^4 - 71y^3 - 63y^2 \end{aligned}$$

$$\begin{aligned} 9. & (5d^2 + 9d)(7d^5 - 8d^4) \\ & = 35d^7 + 23d^6 - 72d^5 \end{aligned}$$

$$\begin{aligned} 10. & (5d^5 - 8d^4)(-9d + 7) \\ & = -45d^6 + 107d^5 - 56d^4 \end{aligned}$$

## Multiplying Two Binomials (C)

Simplify each expression.

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

2.  $(-8f - 1)(-6f - 5)$

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

4.  $(3b^3 + 7b^2)(6b^4 + 4b^3)$

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

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

7.  $(7h + 9)(-9h^2 + 4h)$

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

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

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

## Multiplying Two Binomials (C) Answers

Simplify each expression.

$$\begin{aligned} 1. & (-v^5 + 4v^4)(v + 2) \\ & = -v^6 + 2v^5 + 8v^4 \end{aligned}$$

$$\begin{aligned} 2. & (-8f - 1)(-6f - 5) \\ & = 48f^2 + 46f + 5 \end{aligned}$$

$$\begin{aligned} 3. & (-5v^2 - 5v)(5v^5 + v^4) \\ & = -25v^7 - 30v^6 - 5v^5 \end{aligned}$$

$$\begin{aligned} 4. & (3b^3 + 7b^2)(6b^4 + 4b^3) \\ & = 18b^7 + 54b^6 + 28b^5 \end{aligned}$$

$$\begin{aligned} 5. & (-4s^2 - 7s)(-4s^4 + s^3) \\ & = 16s^6 + 24s^5 - 7s^4 \end{aligned}$$

$$\begin{aligned} 6. & (9v^2 - 7v)(4v^2 - 3v) \\ & = 36v^4 - 55v^3 + 21v^2 \end{aligned}$$

$$\begin{aligned} 7. & (7h + 9)(-9h^2 + 4h) \\ & = -63h^3 - 53h^2 + 36h \end{aligned}$$

$$\begin{aligned} 8. & (-8h^2 + 7h)(4h^2 + 3h) \\ & = -32h^4 + 4h^3 + 21h^2 \end{aligned}$$

$$\begin{aligned} 9. & (c^3 + 4c^2)(8c^4 - 7c^3) \\ & = 8c^7 + 25c^6 - 28c^5 \end{aligned}$$

$$\begin{aligned} 10. & (m^5 - 6m^4)(-2m + 6) \\ & = -2m^6 + 18m^5 - 36m^4 \end{aligned}$$

## Multiplying Two Binomials (D)

Simplify each expression.

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

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

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

4.  $(-2g - 8)(-6g - 1)$

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

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

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

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

9.  $(-7r - 7)(-9r^2 + 8r)$

10.  $(-6q - 7)(-6q^3 + 4q^2)$

## Multiplying Two Binomials (D) Answers

Simplify each expression.

$$\begin{aligned} 1. & (-3a^4 + 8a^3)(a^3 - 6a^2) \\ &= -3a^7 + 26a^6 - 48a^5 \end{aligned}$$

$$\begin{aligned} 2. & (-2q^5 - 5q^4)(2q + 7) \\ &= -4q^6 - 24q^5 - 35q^4 \end{aligned}$$

$$\begin{aligned} 3. & (6v^4 - 2v^3)(-5v^3 - 5v^2) \\ &= -30v^7 - 20v^6 + 10v^5 \end{aligned}$$

$$\begin{aligned} 4. & (-2g - 8)(-6g - 1) \\ &= 12g^2 + 50g + 8 \end{aligned}$$

$$\begin{aligned} 5. & (-6f^3 + 9f^2)(4f^2 - 8f) \\ &= -24f^5 + 84f^4 - 72f^3 \end{aligned}$$

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

$$\begin{aligned} 7. & (-4q + 2)(-5q^5 + 8q^4) \\ &= 20q^6 - 42q^5 + 16q^4 \end{aligned}$$

$$\begin{aligned} 8. & (4n^5 + 2n^4)(8n^4 + 7n^3) \\ &= 32n^9 + 44n^8 + 14n^7 \end{aligned}$$

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

$$\begin{aligned} 10. & (-6q - 7)(-6q^3 + 4q^2) \\ &= 36q^4 + 18q^3 - 28q^2 \end{aligned}$$



## Multiplying Two Binomials (E)

Simplify each expression.

1.  $(7p^2 + 5p)(9p^5 - 4p^4)$

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

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

4.  $(-8z^5 - 4z^4)(-8z - 5)$

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

6.  $(4b^2 - 7b)(7b + 2)$

7.  $(-6q^2 + 3q)(-q + 6)$

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

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

10.  $(9b^3 + 7b^2)(4b + 3)$

## Multiplying Two Binomials (E) Answers

Simplify each expression.

$$\begin{aligned} 1. & (7p^2 + 5p)(9p^5 - 4p^4) \\ & = 63p^7 + 17p^6 - 20p^5 \end{aligned}$$

$$\begin{aligned} 2. & (-6n^2 + 2n)(-7n^5 - 4n^4) \\ & = 42n^7 + 10n^6 - 8n^5 \end{aligned}$$

$$\begin{aligned} 3. & (9v + 4)(-7v^5 + 8v^4) \\ & = -63v^6 + 44v^5 + 32v^4 \end{aligned}$$

$$\begin{aligned} 4. & (-8z^5 - 4z^4)(-8z - 5) \\ & = 64z^6 + 72z^5 + 20z^4 \end{aligned}$$

$$\begin{aligned} 5. & (-6b + 4)(-8b^2 + 9b) \\ & = 48b^3 - 86b^2 + 36b \end{aligned}$$

$$\begin{aligned} 6. & (4b^2 - 7b)(7b + 2) \\ & = 28b^3 - 41b^2 - 14b \end{aligned}$$

$$\begin{aligned} 7. & (-6q^2 + 3q)(-q + 6) \\ & = 6q^3 - 39q^2 + 18q \end{aligned}$$

$$\begin{aligned} 8. & (2r^2 - 4r)(-7r + 3) \\ & = -14r^3 + 34r^2 - 12r \end{aligned}$$

$$\begin{aligned} 9. & (-5k + 7)(-k^3 + 3k^2) \\ & = 5k^4 - 22k^3 + 21k^2 \end{aligned}$$

$$\begin{aligned} 10. & (9b^3 + 7b^2)(4b + 3) \\ & = 36b^4 + 55b^3 + 21b^2 \end{aligned}$$

## Multiplying Two Binomials (F)

Simplify each expression.

1.  $(-2m^2 - m)(-3m^2 - 4m)$

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

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

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

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

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

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

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

9.  $(6x^4 + 6x^3)(6x^4 + 7x^3)$

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

## Multiplying Two Binomials (F) Answers

Simplify each expression.

$$\begin{aligned} 1. & (-2m^2 - m)(-3m^2 - 4m) \\ & = 6m^4 + 11m^3 + 4m^2 \end{aligned}$$

$$\begin{aligned} 2. & (-5x^3 - 4x^2)(2x + 2) \\ & = -10x^4 - 18x^3 - 8x^2 \end{aligned}$$

$$\begin{aligned} 3. & (-2m^3 - 3m^2)(2m^2 + 9m) \\ & = -4m^5 - 24m^4 - 27m^3 \end{aligned}$$

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

$$\begin{aligned} 5. & (m + 6)(-9m^3 - 6m^2) \\ & = -9m^4 - 60m^3 - 36m^2 \end{aligned}$$

$$\begin{aligned} 6. & (4v^5 + 7v^4)(2v^5 + 8v^4) \\ & = 8v^{10} + 46v^9 + 56v^8 \end{aligned}$$

$$\begin{aligned} 7. & (-7x^4 + 5x^3)(2x^4 - 2x^3) \\ & = -14x^8 + 24x^7 - 10x^6 \end{aligned}$$

$$\begin{aligned} 8. & (5n^3 - n^2)(-9n^5 - 2n^4) \\ & = -45n^8 - n^7 + 2n^6 \end{aligned}$$

$$\begin{aligned} 9. & (6x^4 + 6x^3)(6x^4 + 7x^3) \\ & = 36x^8 + 78x^7 + 42x^6 \end{aligned}$$

$$\begin{aligned} 10. & (-5c^4 - 7c^3)(6c^3 + 4c^2) \\ & = -30c^7 - 62c^6 - 28c^5 \end{aligned}$$

## Multiplying Two Binomials (G)

Simplify each expression.

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

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

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

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

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

6.  $(8y^4 - 9y^3)(-2y^2 - 4y)$

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

8.  $(g + 7)(8g^5 + 4g^4)$

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

10.  $(8r^5 - 2r^4)(-5r^5 - 9r^4)$

## Multiplying Two Binomials (G) Answers

Simplify each expression.

$$\begin{aligned} 1. & (-z + 9)(-8z^2 + 6z) \\ & = 8z^3 - 78z^2 + 54z \end{aligned}$$

$$\begin{aligned} 2. & (2b^5 + 7b^4)(5b^5 - 2b^4) \\ & = 10b^{10} + 31b^9 - 14b^8 \end{aligned}$$

$$\begin{aligned} 3. & (6h^5 + 8h^4)(-6h + 1) \\ & = -36h^6 - 42h^5 + 8h^4 \end{aligned}$$

$$\begin{aligned} 4. & (9n + 2)(3n^2 - n) \\ & = 27n^3 - 3n^2 - 2n \end{aligned}$$

$$\begin{aligned} 5. & (2r^5 + r^4)(-9r^2 - 6r) \\ & = -18r^7 - 21r^6 - 6r^5 \end{aligned}$$

$$\begin{aligned} 6. & (8y^4 - 9y^3)(-2y^2 - 4y) \\ & = -16y^6 - 14y^5 + 36y^4 \end{aligned}$$

$$\begin{aligned} 7. & (-6w^5 - 4w^4)(5w^3 - 6w^2) \\ & = -30w^8 + 16w^7 + 24w^6 \end{aligned}$$

$$\begin{aligned} 8. & (g + 7)(8g^5 + 4g^4) \\ & = 8g^6 + 60g^5 + 28g^4 \end{aligned}$$

$$\begin{aligned} 9. & (2f + 2)(-9f^3 - 3f^2) \\ & = -18f^4 - 24f^3 - 6f^2 \end{aligned}$$

$$\begin{aligned} 10. & (8r^5 - 2r^4)(-5r^5 - 9r^4) \\ & = -40r^{10} - 62r^9 + 18r^8 \end{aligned}$$

## Multiplying Two Binomials (H)

Simplify each expression.

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

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

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

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

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

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

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

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

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

10.  $(5g^4 + 5g^3)(3g^4 - g^3)$

## Multiplying Two Binomials (H) Answers

Simplify each expression.

$$\begin{aligned} 1. & (-2k^4 + 7k^3)(6k^5 - 9k^4) \\ & = -12k^9 + 60k^8 - 63k^7 \end{aligned}$$

$$\begin{aligned} 2. & (-9m^2 - m)(5m^3 - 4m^2) \\ & = -45m^5 + 31m^4 + 4m^3 \end{aligned}$$

$$\begin{aligned} 3. & (2f^4 - 7f^3)(-8f^5 + 2f^4) \\ & = -16f^9 + 60f^8 - 14f^7 \end{aligned}$$

$$\begin{aligned} 4. & (-2s^2 - 5s)(9s + 5) \\ & = -18s^3 - 55s^2 - 25s \end{aligned}$$

$$\begin{aligned} 5. & (-4p - 2)(-2p^4 - 2p^3) \\ & = 8p^5 + 12p^4 + 4p^3 \end{aligned}$$

$$\begin{aligned} 6. & (-3k^5 + 3k^4)(-8k^5 - 7k^4) \\ & = 24k^{10} - 3k^9 - 21k^8 \end{aligned}$$

$$\begin{aligned} 7. & (8d - 4)(7d^4 + 8d^3) \\ & = 56d^5 + 36d^4 - 32d^3 \end{aligned}$$

$$\begin{aligned} 8. & (-2a^5 + 6a^4)(8a - 2) \\ & = -16a^6 + 52a^5 - 12a^4 \end{aligned}$$

$$\begin{aligned} 9. & (8q^3 - 9q^2)(3q^4 + 4q^3) \\ & = 24q^7 + 5q^6 - 36q^5 \end{aligned}$$

$$\begin{aligned} 10. & (5g^4 + 5g^3)(3g^4 - g^3) \\ & = 15g^8 + 10g^7 - 5g^6 \end{aligned}$$



## Multiplying Two Binomials (I)

Simplify each expression.

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

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

3.  $(-9p^3 + 3p^2)(6p - 2)$

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

5.  $(4v^4 + 4v^3)(7v^5 + 9v^4)$

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

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

8.  $(9z^2 + 6z)(7z - 2)$

9.  $(-2f^3 - 9f^2)(-2f^2 - 7f)$

10.  $(-7f + 7)(-2f^3 - 4f^2)$

## Multiplying Two Binomials (I) Answers

Simplify each expression.

$$\begin{aligned} 1. & (-5g^2 - 7g)(-3g^4 - 3g^3) \\ & = 15g^6 + 36g^5 + 21g^4 \end{aligned}$$

$$\begin{aligned} 2. & (-7g^4 - 7g^3)(2g^4 + 7g^3) \\ & = -14g^8 - 63g^7 - 49g^6 \end{aligned}$$

$$\begin{aligned} 3. & (-9p^3 + 3p^2)(6p - 2) \\ & = -54p^4 + 36p^3 - 6p^2 \end{aligned}$$

$$\begin{aligned} 4. & (-4f^2 + 9f)(-8f^5 + 7f^4) \\ & = 32f^7 - 100f^6 + 63f^5 \end{aligned}$$

$$\begin{aligned} 5. & (4v^4 + 4v^3)(7v^5 + 9v^4) \\ & = 28v^9 + 64v^8 + 36v^7 \end{aligned}$$

$$\begin{aligned} 6. & (-9w^4 + w^3)(6w - 9) \\ & = -54w^5 + 87w^4 - 9w^3 \end{aligned}$$

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

$$\begin{aligned} 8. & (9z^2 + 6z)(7z - 2) \\ & = 63z^3 + 24z^2 - 12z \end{aligned}$$

$$\begin{aligned} 9. & (-2f^3 - 9f^2)(-2f^2 - 7f) \\ & = 4f^5 + 32f^4 + 63f^3 \end{aligned}$$

$$\begin{aligned} 10. & (-7f + 7)(-2f^3 - 4f^2) \\ & = 14f^4 + 14f^3 - 28f^2 \end{aligned}$$

## Multiplying Two Binomials (J)

Simplify each expression.

1.  $(-6s^3 - 4s^2)(s^4 - 9s^3)$

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

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

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

5.  $(-5v - 9)(9v + 7)$

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

7.  $(7m^3 + 9m^2)(7m^2 - 7m)$

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

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

10.  $(8g^4 + 6g^3)(7g^5 - 7g^4)$

## Multiplying Two Binomials (J) Answers

Simplify each expression.

$$\begin{aligned} 1. & (-6s^3 - 4s^2)(s^4 - 9s^3) \\ &= -6s^7 + 50s^6 + 36s^5 \end{aligned}$$

$$\begin{aligned} 2. & (7q^3 + 9q^2)(-q + 9) \\ &= -7q^4 + 54q^3 + 81q^2 \end{aligned}$$

$$\begin{aligned} 3. & (-6w^5 + 2w^4)(-4w^3 + 4w^2) \\ &= 24w^8 - 32w^7 + 8w^6 \end{aligned}$$

$$\begin{aligned} 4. & (-3s^3 + 6s^2)(9s^2 + 6s) \\ &= -27s^5 + 36s^4 + 36s^3 \end{aligned}$$

$$\begin{aligned} 5. & (-5v - 9)(9v + 7) \\ &= -45v^2 - 116v - 63 \end{aligned}$$

$$\begin{aligned} 6. & (-3q - 6)(-9q^5 - 3q^4) \\ &= 27q^6 + 63q^5 + 18q^4 \end{aligned}$$

$$\begin{aligned} 7. & (7m^3 + 9m^2)(7m^2 - 7m) \\ &= 49m^5 + 14m^4 - 63m^3 \end{aligned}$$

$$\begin{aligned} 8. & (7n^3 + 3n^2)(-n^4 - 9n^3) \\ &= -7n^7 - 66n^6 - 27n^5 \end{aligned}$$

$$\begin{aligned} 9. & (4y^5 - 8y^4)(2y^3 + 7y^2) \\ &= 8y^8 + 12y^7 - 56y^6 \end{aligned}$$

$$\begin{aligned} 10. & (8g^4 + 6g^3)(7g^5 - 7g^4) \\ &= 56g^9 - 14g^8 - 42g^7 \end{aligned}$$