

Multiplying Two Trinomials (C)

Simplify each expression.

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

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

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

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

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

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

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

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

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

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

Multiplying Two Trinomials (C) Answers

Simplify each expression.

$$\begin{aligned} 1. & (5x^3 - x^2 - 6x)(6x^3 + 8x^2 - 7x) \\ & = 30x^6 + 34x^5 - 79x^4 - 41x^3 + 42x^2 \end{aligned}$$

$$\begin{aligned} 2. & (-f^3 - 4f^2 + 3f)(-f^4 + 4f^3 - 2f^2) \\ & = f^7 - 17f^5 + 20f^4 - 6f^3 \end{aligned}$$

$$\begin{aligned} 3. & (-7w^3 - 3w^2 + 6w)(-6w^3 - 3w^2 + w) \\ & = 42w^6 + 39w^5 - 34w^4 - 21w^3 + 6w^2 \end{aligned}$$

$$\begin{aligned} 4. & (-9c^2 + 2c - 5)(5c^2 - 3c + 5) \\ & = -45c^4 + 37c^3 - 76c^2 + 25c - 25 \end{aligned}$$

$$\begin{aligned} 5. & (7f^4 - 6f^3 - 6f^2)(-8f^5 + 4f^4 - 6f^3) \\ & = -56f^9 + 76f^8 - 18f^7 + 12f^6 + 36f^5 \end{aligned}$$

$$\begin{aligned} 6. & (9q^2 + 2q + 7)(7q^3 - 5q^2 - 6q) \\ & = 63q^5 - 31q^4 - 15q^3 - 47q^2 - 42q \end{aligned}$$

$$\begin{aligned} 7. & (-8v^2 - 7v + 2)(-6v^4 + 9v^3 - 2v^2) \\ & = 48v^6 - 30v^5 - 59v^4 + 32v^3 - 4v^2 \end{aligned}$$

$$\begin{aligned} 8. & (-7w^5 - 6w^4 + 9w^3)(w^3 - 4w^2 - 9w) \\ & = -7w^8 + 22w^7 + 96w^6 + 18w^5 - 81w^4 \end{aligned}$$

$$\begin{aligned} 9. & (-5n^4 - 4n^3 - 6n^2)(-6n^3 + 2n^2 - 4n) \\ & = 30n^7 + 14n^6 + 48n^5 + 4n^4 + 24n^3 \end{aligned}$$

$$\begin{aligned} 10. & (-4h^2 + 4h + 9)(3h^2 - 9h - 5) \\ & = -12h^4 + 48h^3 + 11h^2 - 101h - 45 \end{aligned}$$