

Multiplying Two Trinomials (G)

Simplify each expression.

1. $(-6q^4 - 9q^3 - 3q^2)(2q^5 - 4q^4 - 2q^3)$

2. $(6d^3 + 4d^2 + 3d)(3d^2 + 4d + 9)$

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

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

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

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

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

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

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

10. $(-8g^3 + g^2 + 4g)(-3g^5 - g^4 - g^3)$

Multiplying Two Trinomials (G) Answers

Simplify each expression.

$$\begin{aligned} 1. & (-6q^4 - 9q^3 - 3q^2)(2q^5 - 4q^4 - 2q^3) \\ & = -12q^9 + 6q^8 + 42q^7 + 30q^6 + 6q^5 \end{aligned}$$

$$\begin{aligned} 2. & (6d^3 + 4d^2 + 3d)(3d^2 + 4d + 9) \\ & = 18d^5 + 36d^4 + 79d^3 + 48d^2 + 27d \end{aligned}$$

$$\begin{aligned} 3. & (-3c^4 + c^3 + 3c^2)(-6c^3 + 7c^2 + 4c) \\ & = 18c^7 - 27c^6 - 23c^5 + 25c^4 + 12c^3 \end{aligned}$$

$$\begin{aligned} 4. & (9m^2 - 2m + 8)(m^3 + 3m^2 + 8m) \\ & = 9m^5 + 25m^4 + 74m^3 + 8m^2 + 64m \end{aligned}$$

$$\begin{aligned} 5. & (6f^2 + 5f + 3)(7f^3 + 8f^2 - 4f) \\ & = 42f^5 + 83f^4 + 37f^3 + 4f^2 - 12f \end{aligned}$$

$$\begin{aligned} 6. & (8t^5 + 4t^4 + 6t^3)(4t^2 - 7t - 3) \\ & = 32t^7 - 40t^6 - 28t^5 - 54t^4 - 18t^3 \end{aligned}$$

$$\begin{aligned} 7. & (2f^2 + 2f - 8)(-8f^3 + 8f^2 - 4f) \\ & = -16f^5 + 72f^3 - 72f^2 + 32f \end{aligned}$$

$$\begin{aligned} 8. & (9b^5 + 2b^4 + 4b^3)(4b^4 - 6b^3 + 8b^2) \\ & = 36b^9 - 46b^8 + 76b^7 - 8b^6 + 32b^5 \end{aligned}$$

$$\begin{aligned} 9. & (6m^5 + 3m^4 + 7m^3)(-7m^3 + 6m^2 - 8m) \\ & = -42m^8 + 15m^7 - 79m^6 + 18m^5 - 56m^4 \end{aligned}$$

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