

## 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.

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

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

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

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

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

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

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

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

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

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