

## 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.

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

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

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

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

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

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

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

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

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

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