

## 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.

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

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

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

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

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

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

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

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

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

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