

## Multiplying a Monomial by a Binomial (B)

Simplify each expression.

1.  $6y^4(-8y^4 - 6y^3)$

2.  $-3a(-a - 1)$

3.  $-8d^4(8d^2 + 4d)$

4.  $-8x(8x^5 - 6x^4)$

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

6.  $8s^2(-8s - 4)$

7.  $4s^2(-6s^4 - 3s^3)$

8.  $5s(s^3 - 8s^2)$

9.  $-d^5(8d^2 + 8d)$

10.  $-4s^5(-2s^4 - s^3)$

## Multiplying a Monomial by a Binomial (B) Answers

Simplify each expression.

$$\begin{aligned} 1. & 6y^4(-8y^4 - 6y^3) \\ & = -48y^8 - 36y^7 \end{aligned}$$

$$\begin{aligned} 2. & -3a(-a - 1) \\ & = 3a^2 + 3a \end{aligned}$$

$$\begin{aligned} 3. & -8d^4(8d^2 + 4d) \\ & = -64d^6 - 32d^5 \end{aligned}$$

$$\begin{aligned} 4. & -8x(8x^5 - 6x^4) \\ & = -64x^6 + 48x^5 \end{aligned}$$

$$\begin{aligned} 5. & -5a^4(-3a^2 + 9a) \\ & = 15a^6 - 45a^5 \end{aligned}$$

$$\begin{aligned} 6. & 8s^2(-8s - 4) \\ & = -64s^3 - 32s^2 \end{aligned}$$

$$\begin{aligned} 7. & 4s^2(-6s^4 - 3s^3) \\ & = -24s^6 - 12s^5 \end{aligned}$$

$$\begin{aligned} 8. & 5s(s^3 - 8s^2) \\ & = 5s^4 - 40s^3 \end{aligned}$$

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

$$\begin{aligned} 10. & -4s^5(-2s^4 - s^3) \\ & = 8s^9 + 4s^8 \end{aligned}$$