

## Multiplying a Monomial by a Binomial (A)

Simplify each expression.

1.  $-3n^3(-8n^3 - 3n^2)$

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

3.  $9h^4(-9h - 9)$

4.  $4b(9b^5 + 7b^4)$

5.  $-8v^3(3v^5 + 3v^4)$

6.  $-2a^2(-8a^2 + 9a)$

7.  $7a^3(-3a^4 + 6a^3)$

8.  $-6p(2p^3 - 4p^2)$

9.  $-2p^3(-4p^4 - 7p^3)$

10.  $3x^3(-2x^5 + 9x^4)$

# Multiplying a Monomial by a Binomial (A) Answers

Simplify each expression.

$$\begin{aligned} 1. & -3n^3(-8n^3 - 3n^2) \\ & = 24n^6 + 9n^5 \end{aligned}$$

$$\begin{aligned} 2. & 9a^5(-8a^4 + 2a^3) \\ & = -72a^9 + 18a^8 \end{aligned}$$

$$\begin{aligned} 3. & 9h^4(-9h - 9) \\ & = -81h^5 - 81h^4 \end{aligned}$$

$$\begin{aligned} 4. & 4b(9b^5 + 7b^4) \\ & = 36b^6 + 28b^5 \end{aligned}$$

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

$$\begin{aligned} 6. & -2a^2(-8a^2 + 9a) \\ & = 16a^4 - 18a^3 \end{aligned}$$

$$\begin{aligned} 7. & 7a^3(-3a^4 + 6a^3) \\ & = -21a^7 + 42a^6 \end{aligned}$$

$$\begin{aligned} 8. & -6p(2p^3 - 4p^2) \\ & = -12p^4 + 24p^3 \end{aligned}$$

$$\begin{aligned} 9. & -2p^3(-4p^4 - 7p^3) \\ & = 8p^7 + 14p^6 \end{aligned}$$

$$\begin{aligned} 10. & 3x^3(-2x^5 + 9x^4) \\ & = -6x^8 + 27x^7 \end{aligned}$$