

Multiplying a Monomial by a Binomial (C)

Simplify each expression.

1. $-5d^5(-8d + 7)$

2. $-5b^4(-4b^3 - 5b^2)$

3. $6c(-9c + 1)$

4. $7a^4(-9a^2 - 2a)$

5. $3z^5(-6z^4 - z^3)$

6. $-7z^4(3z^3 + 4z^2)$

7. $3c(8c^4 - c^3)$

8. $-6f^3(-7f^2 + 2f)$

9. $7c^5(-c^2 + 2c)$

10. $9x^2(-3x^4 + 7x^3)$

Multiplying a Monomial by a Binomial (C) Answers

Simplify each expression.

$$\begin{aligned} 1. & -5d^5(-8d + 7) \\ & = 40d^6 - 35d^5 \end{aligned}$$

$$\begin{aligned} 2. & -5b^4(-4b^3 - 5b^2) \\ & = 20b^7 + 25b^6 \end{aligned}$$

$$\begin{aligned} 3. & 6c(-9c + 1) \\ & = -54c^2 + 6c \end{aligned}$$

$$\begin{aligned} 4. & 7a^4(-9a^2 - 2a) \\ & = -63a^6 - 14a^5 \end{aligned}$$

$$\begin{aligned} 5. & 3z^5(-6z^4 - z^3) \\ & = -18z^9 - 3z^8 \end{aligned}$$

$$\begin{aligned} 6. & -7z^4(3z^3 + 4z^2) \\ & = -21z^7 - 28z^6 \end{aligned}$$

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

$$\begin{aligned} 8. & -6f^3(-7f^2 + 2f) \\ & = 42f^5 - 12f^4 \end{aligned}$$

$$\begin{aligned} 9. & 7c^5(-c^2 + 2c) \\ & = -7c^7 + 14c^6 \end{aligned}$$

$$\begin{aligned} 10. & 9x^2(-3x^4 + 7x^3) \\ & = -27x^6 + 63x^5 \end{aligned}$$