

Multiplying a Monomial by a Binomial (D)

Simplify each expression.

1. $-4w^3(w - 4)$

2. $-6a^2(7a^5 - 3a^4)$

3. $4k^3(-4k^3 + 6k^2)$

4. $9g^5(-8g^5 - 7g^4)$

5. $-7h(2h - 5)$

6. $2w(7w^2 + 4w)$

7. $-5r(2r^5 + 9r^4)$

8. $-7m(2m^4 + 2m^3)$

9. $-n^4(-2n^2 - 5n)$

10. $-k^3(-2k^4 - 4k^3)$

Multiplying a Monomial by a Binomial (D) Answers

Simplify each expression.

$$\begin{aligned} 1. & -4w^3(w - 4) \\ & = -4w^4 + 16w^3 \end{aligned}$$

$$\begin{aligned} 2. & -6a^2(7a^5 - 3a^4) \\ & = -42a^7 + 18a^6 \end{aligned}$$

$$\begin{aligned} 3. & 4k^3(-4k^3 + 6k^2) \\ & = -16k^6 + 24k^5 \end{aligned}$$

$$\begin{aligned} 4. & 9g^5(-8g^5 - 7g^4) \\ & = -72g^{10} - 63g^9 \end{aligned}$$

$$\begin{aligned} 5. & -7h(2h - 5) \\ & = -14h^2 + 35h \end{aligned}$$

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

$$\begin{aligned} 7. & -5r(2r^5 + 9r^4) \\ & = -10r^6 - 45r^5 \end{aligned}$$

$$\begin{aligned} 8. & -7m(2m^4 + 2m^3) \\ & = -14m^5 - 14m^4 \end{aligned}$$

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

$$\begin{aligned} 10. & -k^3(-2k^4 - 4k^3) \\ & = 2k^7 + 4k^6 \end{aligned}$$