

Multiplying a Monomial by Two Binomials (D)

Simplify each expression.

1. $4c(-9c - 7)(-3c^5 + 5c^4)$

2. $6a^5(-4a^4 - 9a^3)(9a^2 - 4a)$

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

4. $4y^5(-2y^2 + y)(-5y^5 - 8y^4)$

5. $-7k(-k^2 - 7k)(-3k^4 + 5k^3)$

Multiplying a Monomial by Two Binomials (D) Answers

Simplify each expression.

$$\begin{aligned} 1. & 4c(-9c - 7)(-3c^5 + 5c^4) \\ & = 108c^7 - 96c^6 - 140c^5 \end{aligned}$$

$$\begin{aligned} 2. & 6a^5(-4a^4 - 9a^3)(9a^2 - 4a) \\ & = -216a^{11} - 390a^{10} + 216a^9 \end{aligned}$$

$$\begin{aligned} 3. & -v^5(2v^5 + 9v^4)(-v^2 - v) \\ & = 2v^{12} + 11v^{11} + 9v^{10} \end{aligned}$$

$$\begin{aligned} 4. & 4y^5(-2y^2 + y)(-5y^5 - 8y^4) \\ & = 40y^{12} + 44y^{11} - 32y^{10} \end{aligned}$$

$$\begin{aligned} 5. & -7k(-k^2 - 7k)(-3k^4 + 5k^3) \\ & = -21k^7 - 112k^6 + 245k^5 \end{aligned}$$