

Multiplying a Monomial by Two Binomials (J)

Simplify each expression.

1. $-2d^3(3d^2 - 7d)(9d^3 + 9d^2)$

2. $-7v^3(8v^3 - 7v^2)(8v - 5)$

3. $5h^2(-6h^5 + 7h^4)(8h^4 + 5h^3)$

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

5. $-7v^4(v^4 - v^3)(3v^5 + 4v^4)$

Multiplying a Monomial by Two Binomials (J) Answers

Simplify each expression.

$$\begin{aligned} 1. & -2d^3(3d^2 - 7d)(9d^3 + 9d^2) \\ & = -54d^8 + 72d^7 + 126d^6 \end{aligned}$$

$$\begin{aligned} 2. & -7v^3(8v^3 - 7v^2)(8v - 5) \\ & = -448v^7 + 672v^6 - 245v^5 \end{aligned}$$

$$\begin{aligned} 3. & 5h^2(-6h^5 + 7h^4)(8h^4 + 5h^3) \\ & = -240h^{11} + 130h^{10} + 175h^9 \end{aligned}$$

$$\begin{aligned} 4. & -3w^5(6w^4 + 9w^3)(9w^3 - 2w^2) \\ & = -162w^{12} - 207w^{11} + 54w^{10} \end{aligned}$$

$$\begin{aligned} 5. & -7v^4(v^4 - v^3)(3v^5 + 4v^4) \\ & = -21v^{13} - 7v^{12} + 28v^{11} \end{aligned}$$