

Multiplying Three Mon/Polynomials (B)

Simplify each expression.

1. $-3x^4(x^2 - 9x - 9)(-7x^2 + 5x)$

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

3. $-8t^4(-6t^2 - t + 2)(4t^2 + 6t)$

4. $7x^4(-x^4 - 9x^3)(8x^5 + 3x^4 - 8x^3)$

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

Multiplying Three Mon/Polynomials (B) Answers

Simplify each expression.

$$\begin{aligned} 1. & -3x^4(x^2 - 9x - 9)(-7x^2 + 5x) \\ & = 21x^8 - 204x^7 - 54x^6 + 135x^5 \end{aligned}$$

$$\begin{aligned} 2. & 3a^4(-2a^5 - a^4 - 4a^3)(-2a^2 + 4a + 2) \\ & = 12a^{11} - 18a^{10} - 54a^8 - 24a^7 \end{aligned}$$

$$\begin{aligned} 3. & -8t^4(-6t^2 - t + 2)(4t^2 + 6t) \\ & = 192t^8 + 320t^7 - 16t^6 - 96t^5 \end{aligned}$$

$$\begin{aligned} 4. & 7x^4(-x^4 - 9x^3)(8x^5 + 3x^4 - 8x^3) \\ & = -56x^{13} - 525x^{12} - 133x^{11} + 504x^{10} \end{aligned}$$

$$\begin{aligned} 5. & -4m^4(9m + 2)(5m^5 - 7m^4) \\ & = -180m^{10} + 212m^9 + 56m^8 \end{aligned}$$