

## Multiplying a Monomial by Two Binomials (H)

Simplify each expression.

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

2.  $-5s(2s^3 - 3s^2)(-2s + 7)$

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

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

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

## Multiplying a Monomial by Two Binomials (H) Answers

Simplify each expression.

$$\begin{aligned} 1. & 4g^5(9g - 9)(7g^2 + 2g) \\ & = 252g^8 - 180g^7 - 72g^6 \end{aligned}$$

$$\begin{aligned} 2. & -5s(2s^3 - 3s^2)(-2s + 7) \\ & = 20s^5 - 100s^4 + 105s^3 \end{aligned}$$

$$\begin{aligned} 3. & -6x^5(7x^2 + 7x)(x^5 - 6x^4) \\ & = -42x^{12} + 210x^{11} + 252x^{10} \end{aligned}$$

$$\begin{aligned} 4. & y^3(8y^2 + 3y)(-7y^2 - 6y) \\ & = -56y^7 - 69y^6 - 18y^5 \end{aligned}$$

$$\begin{aligned} 5. & 2w^2(5w^4 + 9w^3)(6w^4 + 6w^3) \\ & = 60w^{10} + 168w^9 + 108w^8 \end{aligned}$$