

## Multiplying Three Binomials (C)

Simplify each expression.

1.  $(7g^4 + 3g^3)(5g^2 + 8g)(6g - 3)$

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

3.  $(5d^2 - d)(9d^3 + 3d^2)(-8d - 5)$

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

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

## Multiplying Three Binomials (C) Answers

Simplify each expression.

$$\begin{aligned} 1. & (7g^4 + 3g^3)(5g^2 + 8g)(6g - 3) \\ & = 210g^7 + 321g^6 - 69g^5 - 72g^4 \end{aligned}$$

$$\begin{aligned} 2. & (5t - 4)(9t^2 + 9t)(4t^4 + 7t^3) \\ & = 180t^7 + 351t^6 - 81t^5 - 252t^4 \end{aligned}$$

$$\begin{aligned} 3. & (5d^2 - d)(9d^3 + 3d^2)(-8d - 5) \\ & = -360d^6 - 273d^5 - 6d^4 + 15d^3 \end{aligned}$$

$$\begin{aligned} 4. & (-6d^5 + 4d^4)(-6d^5 + 2d^4)(-7d^5 + 4d^4) \\ & = -252d^{15} + 396d^{14} - 200d^{13} + 32d^{12} \end{aligned}$$

$$\begin{aligned} 5. & (-h^3 + 6h^2)(9h^4 - 6h^3)(h^3 - 2h^2) \\ & = -9h^{10} + 78h^9 - 156h^8 + 72h^7 \end{aligned}$$