

Multiplying a Monomial by a Binomial (G)

Simplify each expression.

1. $-6w^5(7w^4 - 5w^3)$

2. $8r^4(8r^5 + 3r^4)$

3. $-2s^3(-6s^5 - 8s^4)$

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

5. $2g(2g^5 + 7g^4)$

6. $-6a^3(a^3 + 4a^2)$

7. $3y^5(9y^2 - 8y)$

8. $-k^4(-9k^4 + k^3)$

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

10. $6g^3(-9g^4 - g^3)$

Multiplying a Monomial by a Binomial (G) Answers

Simplify each expression.

$$\begin{aligned} 1. & -6w^5(7w^4 - 5w^3) \\ & = -42w^9 + 30w^8 \end{aligned}$$

$$\begin{aligned} 2. & 8r^4(8r^5 + 3r^4) \\ & = 64r^9 + 24r^8 \end{aligned}$$

$$\begin{aligned} 3. & -2s^3(-6s^5 - 8s^4) \\ & = 12s^8 + 16s^7 \end{aligned}$$

$$\begin{aligned} 4. & -2v^4(-6v^4 + 7v^3) \\ & = 12v^8 - 14v^7 \end{aligned}$$

$$\begin{aligned} 5. & 2g(2g^5 + 7g^4) \\ & = 4g^6 + 14g^5 \end{aligned}$$

$$\begin{aligned} 6. & -6a^3(a^3 + 4a^2) \\ & = -6a^6 - 24a^5 \end{aligned}$$

$$\begin{aligned} 7. & 3y^5(9y^2 - 8y) \\ & = 27y^7 - 24y^6 \end{aligned}$$

$$\begin{aligned} 8. & -k^4(-9k^4 + k^3) \\ & = 9k^8 - k^7 \end{aligned}$$

$$\begin{aligned} 9. & -5x^3(-8x + 5) \\ & = 40x^4 - 25x^3 \end{aligned}$$

$$\begin{aligned} 10. & 6g^3(-9g^4 - g^3) \\ & = -54g^7 - 6g^6 \end{aligned}$$