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.

1. $-6w^5(7w^4 - 5w^3)$
$= -42w^9 + 30w^8$

2. $8r^4(8r^5 + 3r^4)$
$= 64r^9 + 24r^8$

3. $-2s^3(-6s^5 - 8s^4)$
$= 12s^8 + 16s^7$

4. $-2v^4(-6v^4 + 7v^3)$
$= 12v^8 - 14v^7$

5. $2g(2g^5 + 7g^4)$
$= 4g^6 + 14g^5$

6. $-6a^3(a^3 + 4a^2)$
$= -6a^6 - 24a^5$

7. $3y^5(9y^2 - 8y)$
$= 27y^7 - 24y^6$

8. $-k^4(-9k^4 + k^3)$
$= 9k^8 - k^7$

9. $-5x^3(-8x + 5)$
$= 40x^4 - 25x^3$

10. $6g^3(-9g^4 - g^3)$
$= -54g^7 - 6g^6$