Multiplying a Monomial by a Binomial (F)

Simplify each expression.

1. $-9n^4(-2n+1)$

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

3. $-4a^5(3a^4+8a^3)$

4. $5y^3(6y^3+8y^2)$

5. $-3b(-6b^5+8b^4)$

6. $2q(-8q^5+9q^4)$

7. $-7s^3(-2s^5-2s^4)$

8. $-5r(-4r-2)$

9. $-9x^5(-4x^3+8x^2)$

10. $2v^3(-8v^4+9v^3)$

Multiplying a Monomial by a Binomial (F) Answers

Simplify each expression.

1. $-9n^4(-2n+1)$
   $= 18n^5 - 9n^4$

2. $5a^4(8a^4+2a^3)$
   $= 40a^8 + 10a^7$

3. $-4a^5(3a^4+8a^3)$
   $= -12a^9 - 32a^8$

4. $5y^3(6y^3+8y^2)$
   $= 30y^6 + 40y^5$

5. $-3b(-6b^5+8b^4)$
   $= 18b^6 - 24b^5$

6. $2q(-8q^5+9q^4)$
   $= -16q^6 + 18q^5$

7. $-7s^3(-2s^5-2s^4)$
   $= 14s^8 + 14s^7$

8. $-5r(-4r-2)$
   $= 20r^2 + 10r$

9. $-9x^5(-4x^3+8x^2)$
   $= 36x^8 - 72x^7$

10. $2v^3(-8v^4+9v^3)$
    $= -16v^7 + 18v^6$