

Multiplying Two Trinomials (D)

Simplify each expression.

1. $(-5r^2 - 4r + 8)(-4r^2 + r + 3)$

2. $(-7a^3 + 2a^2 + 9a)(6a^2 - 7a - 4)$

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

4. $(-q^5 + q^4 + 3q^3)(7q^4 + 8q^3 - q^2)$

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

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

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

8. $(7v^3 - 5v^2 - 9v)(8v^3 + 6v^2 - 7v)$

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

10. $(-2v^5 + 8v^4 - 3v^3)(7v^2 + 9v + 5)$

Multiplying Two Trinomials (D) Answers

Simplify each expression.

- $(-5r^2 - 4r + 8)(-4r^2 + r + 3)$
 $= 20r^4 + 11r^3 - 51r^2 - 4r + 24$
- $(-7a^3 + 2a^2 + 9a)(6a^2 - 7a - 4)$
 $= -42a^5 + 61a^4 + 68a^3 - 71a^2 - 36a$
- $(-8t^5 - 8t^4 - 9t^3)(-2t^3 + 9t^2 - 4t)$
 $= 16t^8 - 56t^7 - 22t^6 - 49t^5 + 36t^4$
- $(-q^5 + q^4 + 3q^3)(7q^4 + 8q^3 - q^2)$
 $= -7q^9 - q^8 + 30q^7 + 23q^6 - 3q^5$
- $(-8y^4 - 9y^3 + 9y^2)(y^2 + 8y + 2)$
 $= -8y^6 - 73y^5 - 79y^4 + 54y^3 + 18y^2$
- $(7x^3 - 5x^2 + 5x)(3x^2 - 6x - 3)$
 $= 21x^5 - 57x^4 + 24x^3 - 15x^2 - 15x$
- $(-3p^5 - 7p^4 + 5p^3)(-6p^2 - 2p + 4)$
 $= 18p^7 + 48p^6 - 28p^5 - 38p^4 + 20p^3$
- $(7v^3 - 5v^2 - 9v)(8v^3 + 6v^2 - 7v)$
 $= 56v^6 + 2v^5 - 151v^4 - 19v^3 + 63v^2$
- $(-5y^2 + 2y + 4)(3y^2 - y + 9)$
 $= -15y^4 + 11y^3 - 35y^2 + 14y + 36$
- $(-2v^5 + 8v^4 - 3v^3)(7v^2 + 9v + 5)$
 $= -14v^7 + 38v^6 + 41v^5 + 13v^4 - 15v^3$