Adding & Subtracting Quadratic Expressions (H)

Simplify each expression.

1. $-5(-2d^2 + 3d - 4) + 7(2d^2 + 5d + 4)$

2. $-3(-2p^2 + 9p + 3) + 2(8p^2 + 9p - 6)$

3. $-9(2y^2 - 5y + 7) + 2(-6y^2 + y - 4)$

4. $6(x^2 - 6x - 9) + 2(7x^2 - 5x - 6)$

5. $5(-2q^2 - q - 3) - 2(3q^2 + 6q + 2)$

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

7. $6(6s^2 - 5s + 1) - 3(-9s^2 + 5s - 6)$

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

9. $-7(5k^2 + 7k + 1) + 3(-2k^2 + k - 3)$

10. $-4(4m^2 - 4m - 3) + 7(7m^2 + 7m + 4)$

Adding & Subtracting Quadratic Expressions (H) Answers

Simplify each expression.

1. $-5(-2d^2 + 3d - 4) + 7(2d^2 + 5d + 4)$
   $24d^2 + 20d + 48$

2. $-3(-2p^2 + 9p + 3) + 2(8p^2 + 9p - 6)$
   $22p^2 - 9p - 21$

3. $-9(2y^2 - 5y + 7) + 2(-6y^2 + y - 4)$
   $-30y^2 + 47y - 71$

4. $6(x^2 - 6x - 9) + 2(7x^2 - 5x - 6)$
   $20x^2 - 46x - 66$

5. $5(-2q^2 - q - 3) - 2(3q^2 + 6q + 2)$
   $-16q^2 - 17q - 19$

6. $(7f^2 + 3f + 2) + 8(-7f^2 - 5f + 4)$
   $-49f^2 - 37f + 34$

7. $6(6s^2 - 5s + 1) - 3(-9s^2 + 5s - 6)$
   $63s^2 - 45s + 24$

8. $-5(7c^2 + 9c - 5) + 4(c^2 - 2c + 3)$
   $-31c^2 - 53c + 37$

9. $-7(5k^2 + 7k + 1) + 3(-2k^2 + k - 3)$
   $-41k^2 - 46k - 16$

10. $-4(4m^2 - 4m - 3) + 7(7m^2 + 7m + 4)$
    $33m^2 + 65m + 40$