Simplifying Quadratic Expressions (A)

Simplify each expression by combining like terms.

1. $-2w + 6w^2 + 3 - 6w^2 - 2 - w^2 - 7w^2$

2. $-b + b + 6b^2 - 5b^2 + 3b + 3b^2 + 7b^2$

3. $6 + 7z^2 + 2z - 3 - 8z^2 + 5z^2 - 6z^2$

4. $-5m^2 + 7m + 9m^2 - 2m^2 + 9m^2 - 8m^2 - 6m$

5. $-7b^2 + 9 - 5b^2 - 4b^2 - b^2 + 9 + 3b^2$

6. $-7 - 6 + 7q^2 + 9q^2 - 2q^2 + 8q^2 + 2$

7. $5z + 4 - 9z^2 - 4z^2 + 4 + 4z^2 + 4z^2$

8. $9d^2 + 2 + 7d - 1 + 6 - 6d^2 + 9$

9. $2s^2 + 6 + 6s - 8s + 4s^2 + 8 + 4s^2$

10. $-7s^2 + 7s + 4s^2 + 5s + 5s^2 - 9s - 3s$

Simplify each expression by combining like terms.

1. $-2w + 6w^2 + 3 - 6w^2 - 2 - w^2 - 7w^2$
   $= -8w^2 - 2w + 1$

2. $-b + b + 6b^2 - 5b^2 + 3b + 3b^2 + 7b^2$
   $= 11b^2 + 3b$

3. $6 + 7z^2 + 2z - 3 - 8z^2 + 5z^2 - 6z^2$
   $= -2z^2 + 2z + 3$

4. $-5m^2 + 7m + 9m^2 - 2m^2 + 9m^2 - 8m^2 - 6m$
   $= 3m^2 + m$

5. $-7b^2 + 9 - 5b^2 - 4b^2 - b^2 + 9 + 3b^2$
   $= -14b^2 + 18$

6. $-7 - 6 + 7q^2 + 9q^2 - 2q^2 + 8q^2 + 2$
   $= 22q^2 - 11$

7. $5z + 4 - 9z^2 - 4z^2 + 4 + 4z^2 + 4z^2$
   $= -5z^2 + 5z + 8$

8. $9d^2 + 2 + 7d - 1 + 6 - 6d^2 + 9$
   $= 3d^2 + 7d + 16$

9. $2s^2 + 6 + 6s - 8s + 4s^2 + 8 + 4s^2$
   $= 10s^2 - 2s + 14$

10. $-7s^2 + 7s + 4s^2 + 5s + 5s^2 - 9s - 3s$
    $= 2s^2$