Homework #___1_____

The first one is done for you.

1. $8p + 6$

    $- (4p + 2)$

    $4p + 4$

2. $9y^2 - 6y + 3$

    $- (5y^2 - 3y + 2)$

3. $5z^3 + 8z^2 + 5$

    $- (2z^3 + 3z^2 - 2)$

4. $12k + 3$

    $+ 4k + 2$

5. $6s^3 + 9s + 10$

    $+ 3s^3 + 4s - 10$

6. $15a^4 + 6a^2 + a$

    $+ 6a^4 - 2a^2 + a$

7. $(5x^3 + 14) - (2x^3 - 1)$

8. $(15g^2 + 6g - 3) - (10g^2 + 2g + 2)$

9. $(12p^5 + 8) + (8p^5 + 6)$

10. $(11b^2 + 3b - 1) + (2b^2 + 2b + 8)$

Solve. The first problem is started for you.

11. Rebecca is building a pen for her rabbits against the side of her house. The polynomial $4n + 8$ represents the length and the polynomial $2n + 6$ represents the width.

    a. What polynomial represents the perimeter of the entire pen?

       $(4n + 8) + (4n + 8) + (2n + 6) + (2n + 6) =$

    b. What polynomial represents the perimeter of the pen NOT including the side of the house?

12. The polynomial $35p + 300$ represents the number of men enrolled in a college and $25p + 100$ represents the number of women enrolled in the same college. What polynomial shows the difference between the number of men and women enrolled in the college?

Homework #___1_____

1. Which expression is equivalent to $2x + 6(x-3)$?

   A $8x - 3$

   B $3x + 3$

   C $8x - 18$

2. Find the product of $(t + 8)$ and $(t - 7)$.

3. Multiply $11x + 3$ by 4.

4. Which expression is **not** equivalent to $(x+4)(x-3)$?

   A $x^2 + 7x - 12$

   B $x^2 - 3x + 4x - 12$

   C $x(x-3) + 4(x-3)$

5. Multiply $(x + 2)(x + 3)$. What is the product?

6. What is the product of $5(5x^2 + 2x - 4)$?

7. Multiply $(y + 6)(y + 6)$.

8. Which product results in a difference of squares?

   A $(z-9)(z+9)$

   B $(z+4)(z+4)$

   C $(z-8)(z-8)$

9. A rectangular television screen has an area of $w^2 + 2w$ square inches. If the width of the television screen is w inches, what is the length of the television?

10. Celeste has a garden that has a length of $15x$ and a width of $3x + 5$ feet.

    a. Write a polynomial that represents the perimeter of the garden.

    b. Write a polynomial that represents the area of the garden by multiplying $15x(3x + 5)$.

    c. Find the area of the garden if $x = 3$ ft.