Beginning Algebra	**Name:** _____
Study Guide 13	**Class:** _____
Due Date: _____	**Score:** _____

No Work ⇔ No Points

Use Pencil Only ⇔ Be Neat & Organized

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1. Name the following polynomial:

(a) (1 point) $5x^3 - 27x$

(a) _____

(b) (1 point) $2x^2 - 45x + 10$

(b) _____

(c) (1 point) $-100x^{15}$

(c) _____

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2. Give the degree and coefficient of the following:

(a) (2 points) $-15x^3$

(a) _____

(b) (2 points) $100x^7y^8z$

(b) _____

(c) (2 points) -1000

(c) _____

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3. (3 points) Simplify and write in descending order:
$5x^2 - 16x - 4(2x^2 - 4x - 1) + 3(-x^5 + 2x) - 10$

3. _____

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4. (3 points) Complete the following table for the polynomial $5x^3 - x^2 + 10x$, then give the degree and the leading coefficient of the polynomial.

Monomial	Coefficient	Degree

4. _____

5. (4 points) Complete the following table for the polynomial $-3x^3y^2 - x^2y^8 - 2015 + 10xy$, then give the degree and the leading coefficient of the polynomial.

Monomial	Coefficient	Degree

5. _____

6. (2 points) Evaluate $-3x^4 + 25x + 99$ if $x = -2$.

6. _____

7. (1 point) What is the degree of a constant monomial?

7. _____

8. Simplify:

(a) (2 points) $(3x^2 - 5x + 7) + (-8x^2 - 5x - 7)$

(a) _____

(b) (2 points) $(3x^2 - 5x + 7) - (-8x^2 - 5x - 7)$

(b) _____

(c) (2 points) $-3x^3y^4(5x^2y - 8xy^4)$

(c) _____

(d) (2 points) $(3x - 7)(2x + 5)$

(d) _____

(e) (2 points) $(3x - 5)^2$

(e) _____

(f) (2 points) $(5x^3 - 7y^2)(5x^3 + 7y^2)$

(f) _____

(g) (2 points) $(4x - 3)(16x^2 + 12x + 9)$

(g) _____

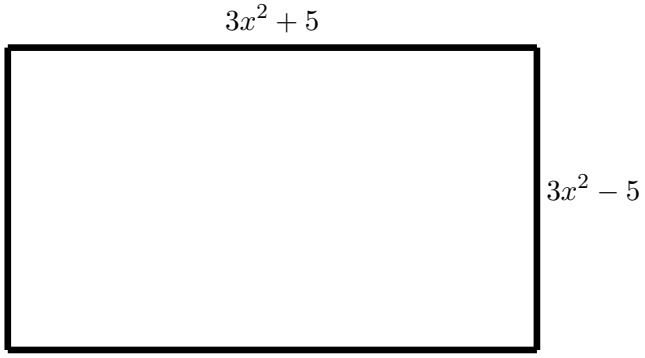
9. (3 points) Simplify: $(5.8 \times 10^{-15}) \bullet (8.5 \times 10^{-5})$

9. _____

10. (3 points) Simplify: $\dfrac{1.2 \times 10^{-18}}{6 \times 10^{15}}$

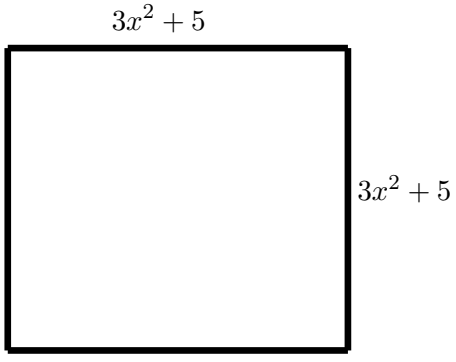
10. _____

11. (4 points) Find an expression in simplest form for the area and the perimeter of the shape below.



11. _____

12. (4 points) Find an expression in simplest form for the area and the perimeter of the shape below.



12. _____