

Algebra CH11 Practice Test

1. Classify this polynomial by degree and terms:

a. $-3x^2 - 15x + 7$

b. $3w^5$

c. $7x^3 - 2x - 9x^5 + 1 - 3x^{10}$

2. Simplify each:

a. $(3x^3 + 5x^2 - 1) + (x^3 - 4x^2 + 2x - 5)$

b. $(3x^3 + 5x^2 - 1) - (5x^3 + 4x^2 - 2x - 5)$

c. $(3a^2 - 1)(5a^3 + 3)$

d. $(6x + 2)^2$

e. $(2x - 4)(2x^2 + 8x - 4)$

f. $(w - 2y)(w + 2y)$

3. Rewrite the polynomial in standard form and circle the leading coefficient

$$-5x + 7x^3 - 15x^5 + 20$$

4. The width of a rectangle is $(3w-7)$ and it's length is $(w+5)$. Write an expression to represent the rectangle's perimeter.

5. Write an example of a trinomial with a degree of 6.