Bellwork Algebra 2 Wednesday, October 30, 2019

State the Degree and Leading Coefficient of each Polynomial.

1. $f(x) = 12x^3 - 5x^2 + x^5 - 7$

Deg= LC =

2. $y = -6x^4 + 72x^3 + x^4 + 8x^2 - 9 + 5x^4$

Deg = LC =

3. $f(x) = (x + 1)(3x + 1)(2x - 5)$

Deg= LC =

4. $y = (5x + 7)(3x - 2)^2(x + 1)$

Deg= LC =

5. State whether the Leading Coefficient is **Positive** or **Negative** and if the Degree is **Even** or **Odd**.

$f(x) = -8x(3 - x)(4x - 7)^2(x - 5)^3$

Deg: Even or Odd LC: Positive or Negative

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State the Degree and Leading Coefficient of each Polynomial.

1. $f(x) = 12x^3 - 5x^2 + x^5 - 7$

$= x^5 + 12x^3 - 5x^2 - 7$

Deg= 5 LC = 1

2. $y = -6x^4 + 72x^3 + x^4 + 8x^2 - 9 + 5x^4$

$-6x^4 + x^4 + 5x^4 = 0x^4$

$= 72x^3 + 8x^2 - 9$

Deg = 3 LC = 72

3. $f(x) = (x+1)(3x+1)(2x-5)$

$(x)(3x)(2x)$

$6x^3$

Deg= 3 LC = 6

4. $y = (5x+7)(3x-2)^2(x+1)$

$(5x)(3x)^2(x)$

$(5x)(9x^2)(x) = 45x^4$

Deg= 4 LC = 45

5. State whether the Leading Coefficient is **Positive** or **Negative** and if the Degree is **Even** or **Odd**.

$f(x) = -8x(3-x)(4x-7)^2(x-5)^3$

$(-8x)(-x)(4x)^2(x)^3 = (-8x)(-x)(16x^2)(x^3)$

$= 128x^7$

Deg: Even or Odd LC: Positive or Negative

DEG = 7

LC = 128