

Bellwork Hon Alg 2 Tuesday, December 16, 2016

State the Degree and Leading Coefficient of each Polynomial.

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

Deg=

LC =

2. $f(x) = (6x + 1)^2(3x + 1)(5 - 2x)$

Deg =

LC =

3. $f(x) = 2x(4x - 9)^3(x - 7)(5x + 11)^2$

Deg=

LC =

4. $y = (5x^2 + 7)^2(5 - 3x)^3(x + 1)(4x - 9)^2$

Deg =

LC =

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ANSWERS

State the Degree and Leading Coefficient of each Polynomial.

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

Deg= 5

LC = 5

2. $f(x) = (6x + 1)^2(3x + 1)(5 - 2x)$
 $(36x^2)(3x)(-2x) \rightarrow -216x^4$

Deg = 4

LC = -216

3. $f(x) = 2x(4x - 9)^3(x - 7)(5x + 11)^2$
 $(2x)(64x^3)(x)(25x^2) \rightarrow 3200x^7$

Deg = 7

LC = 3200

4. $y = (5x^2 + 7)^2(5 - 3x)^3(x + 1)(4x - 9)^2$
 $(25x^4)(-27x^3)(x)(16x^2) \rightarrow -10,800x^{10}$

Deg = 10

LC = -10,800