

Bellwork Monday, May 19, 2014

1. State the degree of each polynomial.

a) $10x^2 - 6x + 14x^4 - 9x^3 + 70 = 4^{\text{th}} \text{ degree}$

b) $-8a^3bc^4 = 8^{\text{th}} \text{ degree}$

2. Write each polynomial in Standard Form then give it a name based on its degree and number of terms.

a) $-14 + 9x^3$

$9x^3 - 14$

cubic binomial

b) $9w$

Linear monomial

c) $3 - 8x - 6x^2$

$-6x^2 - 8x + 3$

Quadratic trinomial

d) -95.3

Constant monomial

3. Factor using GCF:

$54h^6jk^4 + 24h^4j^6k^7 - 48h^3j^9k^3$

$6h^3jk^3(9h^3k + 4h^2j^5k^4 - 8j^6)$

Expand each. Write your answer in Standard Form if there is only one variable.

4. $(c + 7)(c - 10)$

$c^2 + -10c + 7c + -70$

$c^2 - 3c - 70$



5. $(5k - 8)(2k - 11)$

$10k^2 - 55k - 16k + 88$

$10k^2 - 71k + 88$

6. $(3a+4)^2$

$(3a+4)(3a+4)$

$9a^2 + 24a + 16$

$(3a)^2 + 24a + (4)^2$

7. $(7p+5q)(7p-5q)$

$49p^2 - 25q^2$

$(7p)^2 - (5q)^2$

8. $(2b+3)(4b^2-7b-10)$

$8b^3 - 14b^2 - 26b - 30$

$8b^3 - 2b^2 - 11b - 30$

To be considered the
Difference of Perfect Squares:

- Coefficients and constants must be perfect squares.
- Exponents must be even.

$(+)(-)$

Factor each completely.

9. $9m^2 - 100n^6$

$(3m+10n^3)(3m-10n^3)$

10. $7y^5 - 112y^3$

$7y^3(y^2 - 16)$

$7y^3(y-4)(y+4)$