Algebra 1 Bellwork Thursday, March 19, 2015

1. State the degree of each polynomial.

a) $-4m^3 + 7m - 8m^4 + 16$ b) $12P^4Q^2R$

2. Name each polynomial by its degree.

a) $4x - 9$ b) $3x^3 + 8x^2 - x^3 + 5 - 2x^3$ c) 50 d) $12x + x^3$

3. Name each polynomial by the number of terms.

a) $-6x^2 + 4x - 1$ b) $9x^3 + 15$ c) $-\frac{2}{3}x$

4. Expand. $-9a^3bc^5(6a^4c + 2a^2b^3c^2 - 5ab^9)$

5. Find the GCF of the terms in each polynomial.

a) $36w^5y^2 - 32w^3y$ b) $18g^7h^5k^3 - 24g^3h^4k^6 + 48gh^6k^4$

6. Fill in the blanks to complete the problem: _____ (_____ + _____) $= 16x^3 + 40x^2$

7. Use these functions: $f(a) = -3a^2 + 2a - 5$ $g(a) = 4a^2 - 9a - 7$

Find this difference: $f(a) - g(a) =$

Algebra 1 Bellwork Thursday, March 19, 2015 Answers

1. State the degree of each polynomial.

a) $-4m^3 + 7m - 8m^4 + 16$ 4

b) $12P^4Q^2R$ 7

2. Name each polynomial by its degree.

a) $4x - 9$ Linear

b) $3x^3 + 8x^2 - x^3 + 5 - 2x^3$ $= 8x^2 + 5$ Quadratic

c) 50 Constant

d) $12x + x^3$ Cubic

3. Name each polynomial by the number of terms.

a) $-6x^2 + 4x - 1$ Trinomial

b) $9x^3 + 15$ Binomial

c) $-\frac{2}{3}x$ Monomial

4. Expand. $-9a^3bc^5(6a^4c + 2a^2b^3c^2 - 5ab^9)$

$-54a^7bc^6 - 18a^5b^4c^7 + 45a^4b^{10}c^5$

5. Find the GCF of the terms in each polynomial.

a) $36w^5y^2 - 32w^3y$ $4w^3y$

b) $18g^7h^5k^3 - 24g^3h^4k^6 + 48gh^6k^4$ $6gh^4k^3$

6. Fill in the blanks to complete the problem: $8x^2$ ($2x$ + 5) $= 16x^3 + 40x^2$

7. Use these functions: $f(a) = -3a^2 + 2a - 5$ $g(a) = 4a^2 - 9a - 7$

Find this difference: $f(a) - g(a) =$

$-3a^2 + 2a - 5 - (4a^2 - 9a - 7)$

$= -7a^2 + 11a + 2$