

Algebra 1 Quiz Review Sec 9-1,2,3,4,7

Spring 2014

For each polynomial give it's name based on

a) the degree

b) the number of terms

1. $14x^3 + 7x$ 2. $19c$ 3. $12x^2 - 7x + 3$ 4. -3.7

5. State the degree of each a) $42c^6d^3$ b) $3x^4 - 7x^3 + 8x$

6. Write this polynomial in standard form.

$42c^2 - 8c^5 + 2 - 9c^4 - c$

Factor each using GCF.

7. $15A + 60$

8. $H^6 - 12H^4$

9. $24M^5N + 15M^3N^4$

10. $36A^5B^2C + 18A^4B^3C^2 - 54AB^4C^6$

Expand each. For polynomials with one variable write the answer in standard form.

11. $6k^3(5k^2 - 9k)$

12. $3C^2D^5(4CD + 8C^3D^3)$

13. $(M + 3)(M + 9)$

14. $(W - 7)(W - 4)$

15. $(7Q - 10)(3Q + 2)$

16. $(5E + 8)(2E^2 - 5)$

17. $(4P - 5Q)(6P + 2Q)$

18. $(8C^2 - 3D^3)(2C^2 - D^3)$

19. $(N + 7)(N - 7)$

20. $(8G + 5)(8G - 5)$

21. $(R - 6)(2R^2 + 4R + 3)$

22. $(Y - 9)^2$

23. $(4a + 7b)^2$

24. $(3x^2 - 8y^3)(3x^2 + 8y^3)$

Factor each completely. Make sure you look for a GCF first.

25. $x^2 - 36$

26. $9y^2 - 100$

27. $25m^2 - 4n^2$

28. $81g^4 - 49h^{10}$

29. $5b^2 - 80$

30. $3D^3 - 75D$

ANSWERS**Algebra 1 Quiz Review Sec 9-1,2,3,4,7**

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1. $14x^3 + 7x$ a) cubic b) binomial

2. $19c$ a) linear b) monomial

3. $12x^2 - 7x + 3$ a) quadratic b) trinomial

4. -3.7 a) constant b) monomial

5. a) $42c^6d^3$ degree=9 b) $3x^4 - 7x^3 + 8x$ degree=4

6. $-8c^5 - 9c^4 + 42c^2 - c + 2$

7. $15(A + 4)$ 8. $H^4(H^2 - 12)$

9. $3NM^3(8M^2 + 5N^3)$ 10. $18AB^2C(2A^4 + CBA^3 - 3C^5B^2)$

11. $30k^5 - 54k^4$ 12. $12C^3D^6 + 24C^5D^8$ 13. $M^2 + 12M + 27$

14. $W^2 - 11W + 28$ 15. $21Q^2 - 16Q - 20$ 16. $10E^3 + 16E^2 - 25E - 40$

17. $24P^2 - 22PQ - 10Q^2$ 18. $16C^4 - 14C^2D^3 + 3D^6$

19. $N^2 - 49$ 20. $64G^2 - 25$ 21. $2R^3 - 8R^2 - 21R - 18$

22. $Y^2 - 18Y + 81$ 23. $16a^2 + 56ab + 49b^2$ 24. $9x^4 - 64y^6$

25. $(x - 6)(x + 6)$ 26. $(3y - 10)(3y + 10)$ 27. $(5m - 2n)(5m + 2n)$

28. $(9g^2 - 7h^5)(9g^2 + 7h^5)$ 29. $5(b - 4)(b + 4)$ 30. $3D(D - 5)(D + 5)$