

HW - 2/4/14

pg. 80-81; #19-31, 41, 42

19. x^8
degree: 8

20. $6x^3y$
degree: 4

21. 8
degree: 0

22. $a^4b^6c^3$
degree: 13

23. $2x^4 + 3x^3 + x^2 - 7x$
leading coeff: 2
degree: 4
of terms: 4
quartic polynomial

24. $-4x^4 + 6x + 5^7$
leading coeff: -4
degree: 4
of terms: 3
quartic trinomial

25. $2x^3 + 10x - 9$
leading coeff: 2

degree: 3

of terms: 3

cubic trinomial

26. $2x^6 - 4x^4 + 3x^2 - 1$

leading coeff: 2

degree: 6

of terms: 4

6th-degree polynomial

27. $x^2 - 3x + 4$

$+x^3 + 3x - 4$

$x^3 + x^2$

28. $x^2 - 3x + 4$

$-x^3 - 3x + 4$

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

29. $5y^3 - 2y^2 - 1$

$-y + 2y + 3$

$5y^3 - 3y^2 + 2y + 2$

30. $2y^2 - 5y + 3$

$+y^2 - 2y - 5$

$3y^2 - 7y - 2$

$$31. d(1) = -4(1)^3 + (1)^2 \\ = -3$$

$$d(2) = -4(2)^3 + (2)^2 \\ = -28$$

b. how many cm you are below a diving board 1 m and 2 m from the stabilizing point.

$$41. SA = 2\pi r^2 + 2\pi rh \\ = 2\pi(x)^2 + 2\pi(x)(x+4) \\ = 2\pi x^2 + 2\pi x^2 + 8\pi x \\ = 4\pi x^2 + 8\pi x$$

$$42. SA = 2lw + 2lh + 2wh \\ = 2(x)(x) + 2(x)(x+1) + 2(x)(x+1) \\ = 2x^2 + 2x^2 + 2x + 2x^2 + 2x \\ = 6x^2 + 4x$$