Extra practice

36. $x^2 + 7x + 6$

$(x+6)(x+1)$

37. $x^2 + 16x + 64$

$(x+8)(x+8)$

38. $x^2 - 8x + 12$

$(x-6)(x-2)$

39. $x^2 - 49$

$(x-7)(x+7)$

40. $-x^2 + 8x - 15$

$-1(x^2 - 8x + 15)$

$-1(x-5)(x-3)$

41. $8x^3 + 24x$

$8x(x^2+3)$

42. $2x^2 - 10x - 48$

$2(x^2 - 5x - 24)$

$2(x-8)(x+3)$

43. $x^2 + 13x + 12$

$(x+1)(x+12)$

44. $x^3 + 12x^2 - 4x - 48$

$(x+12)(x+2)(x-2)$

45. $64 - x^2$

$(8-x)(8+x)$

46. $16x^2 - 9$

$(4x-3)(4x+3)$

47. $x^2 + 3x - 10$

$(x+5)(x-2)$

48. $10x^2 - 25x$

$5x(2x-5)$

49. $3x^2 + 18x + 24$

$3(x^2 + 6x + 8)$

$3(x+4)(x+2)$

50. $100x^2 - 81$

$(10x-9)(10x+9)$

51. $x^2 - 6x + 5$

$(x-5)(x-1)$

52. $2x^2 - 8$

$2(x^2-4)$

$2(x-2)(x+2)$

53. $3x^2 - 10x + 7$

Not Factorable

No integer roots

54. $9x^2 - 25$

$(3x-5)(3x+5)$

55. $x^4 + 6x^2 - 7$ ← Challenge!

$(x+1)(x-1)(x^2+7)$

used calculator...

then thought backwards...

$(x^2-1)(____) =$

$x^4 + 6x^2 - 7$

$x^2 \cdot ___$ $\quad -1 \cdot ___$