Factor the difference of squares: $x^2 - 25$

Factor the difference of squares: $y^2 - 64$

Factor the difference of squares: $4x^2 - 81$

Factor the difference of squares: $81 - 4x^2$

Factor the difference of squares: $9x^2 - 4$

Factor the difference of squares: $9y^2 - 100$

Factor the difference of squares: $36w^2 - 49$

Factor the difference of squares: $36w^2 - 49y^2$

Factor: $2x^3 - 50x$ (Hint: first remove a common factor)

Factor: $x^2 + 9$
Factor the difference of squares: \( x^2 - 25 = (x+5)(x-5) \)

Factor the difference of squares: \( y^2 - 64 = (y+8)(y-8) \)

Factor the difference of squares: \( 4x^2 - 81 = (2x+9)(2x-9) \)

Factor the difference of squares: \( 81 - 4x^2 = (9 + 2x)(9 - 2x) \)

Factor the difference of squares: \( 9x^2 - 4 = (3x+2)(3x-2) \)

Factor the difference of squares: \( 9y^2 - 100 = (3y+10)(3y-10) \)

Factor the difference of squares: \( 36w^2 - 49 = (6w+7)(6w-7) \)

Factor the difference of squares: \( 36w^2 - 49y^2 = (6w+7y)(6w-7y) \)

Factor: \( 2x^3 - 50x = 2x(x^2 - 25) = 2x(x+5)(x-5) \)

Factor: \( x^2 + 9 = \) cannot be factored. It might look like the answer is \((x+3)^2\), but it is not, because \((x+3)^2 = (x+3)(x+3) = x^2 + 3x + 3x + 9 = x^2 + 6x + 9 \neq x^2 + 9\)