Factoring Special Products

Factor the following special products.

A. Difference of two squares

1. $x^2 - 81 =$
2. $x^2 - 100 =$
3. $x^2 - 49 =$
4. $9x^2 - 16 =$
5. $4x^2 - 9 =$

B. Sum and Difference of Two Cubes

1. $x^3 + 125 =$
2. $27x^3 + 8 =$
3. $64x^3 + 729 =$
4. $8x^3 - 729 =$
5. $125x^3 - 512 =$

C. Perfect Square Trinomial

1. $x^2 - 14x + 49 =$
2. $x^2 + 22x + 121 =$
3. $x^2 + 18x + 81 =$
4. $25x^2 - 120x + 144 =$
5. $49x^2 + 84x + 36 =$

(x-7)(x-7)
(x+9)(x-9)
(x+9)(x+9)
(5x-12)(5x-12)
(7x+6)(7x+6)
(5x-8)(25 x^2+40x+64)
(3x+2)(9 x^2 –6x+4)
(4x+9)(16 x^2-36x+81)
(3x+4)(3x-4)
(x+11)(x+11)
(x+7)(x-7)
(x+5)(x^2 –5x+25)
(2x-9)(4 x^2+18x+81)
(2x+3)(2x-3)
(x+10)(x-10)

LIVEWORKSHEETS