Solving By Sum/Difference of Cubes Practice II

Date_____ Period____

Factor AND solve each of the following polynomials.

1) $x^3 - 216$

2) $x^3 + 512$

3) $x^3 + 27$

4) $a^3 - 1$

5) $27x^3 + 64$

6) $64m^3 + 1$

7) $64m^3 - 125$

8) $64x^3 + 27$

9) $x^3 + 729$

10) $u^3 - 1000$

Solving By Sum/Difference of Cubes Practice II

Date_____ Period____

Factor AND solve each of the following polynomials.

1) $x^3 - 216$

$(x - 6)(x^2 + 6x + 36)$

2) $x^3 + 512$

$(x + 8)(x^2 - 8x + 64)$

3) $x^3 + 27$

$(x + 3)(x^2 - 3x + 9)$

4) $a^3 - 1$

$(a - 1)(a^2 + a + 1)$

5) $27x^3 + 64$

$(3x + 4)(9x^2 - 12x + 16)$

6) $64m^3 + 1$

$(4m + 1)(16m^2 - 4m + 1)$

7) $64m^3 - 125$

$(4m - 5)(16m^2 + 20m + 25)$

8) $64x^3 + 27$

$(4x + 3)(16x^2 - 12x + 9)$

9) $x^3 + 729$

$(x + 9)(x^2 - 9x + 81)$

10) $u^3 - 1000$

$(u - 10)(u^2 + 10u + 100)$