Name_____ Period_____

HW Section 7-3 Day 2

1. Use substitution to determine whether $x-4$ is a factor of $3x^4-10x^3-59x^2+146x+120$.

[1] _____

2. Use substitution to determine whether $x-3$ is a factor of $4x^4+3x^3-76x^2+63x+90$.

[2] _____

3. Use substitution to determine which of the given linear expressions is a *not* a factor of $3x^4-16x^3-15x^2+88x+60$.

[A] $x+2$ [B] $3x+2$ [C] $x+3$ [D] $x-3$

[3] _____

4. Use substitution to determine which of the given linear expressions is a *not* a factor of $3x^4-5x^3-35x^2+25x+12$.

[A] $x+3$ [B] $x-1$ [C] $x+4$ [D] $x-4$

[4] _____

Write the product as a polynomial in standard form.

5. $(x + 2)(x + 4)(x - 2)$

[A] $x^3 + 2x^2 - 4x - 8$ [B] $x^3 + 4x^2 - 8x + 8$ [C] $x^3 - 16$ [D] $x^3 + 4x^2 - 4x - 16$

[5] _____

6. $(x + 4)^2 (x + 2)$

[A] $x^3 + 32x^2 + 16x + 16$ [B] $x^3 + 10x^2 + 16x + 16$ [C] $x^3 + 10x^2 + 32x + 32$ [D] $x^3 + 32$

[6] _____