

**HW #3: Remainder Theorem****Evaluate each function at the given value.**

1)  $f(m) = m^2 - m - 8$  at  $m = 5$

2)  $f(a) = a^3 + 2a^2 - 12a + 23$  at  $a = -5$

3)  $f(x) = 3x^3 - 23x^2 + 32x - 8$  at  $x = 6$

4)  $f(x) = x^4 - 9x^3 + 19x^2 + 8x - 23$  at  $x = 4$

5)  $f(n) = -5n^5 + 36n^4 - 31n^3 - 26n^2 - 24n + 4$  at  $n = 6$

6)  $f(a) = a^2 + 8a + 8$  at  $a = -2$

7)  $f(x) = 4x^2 + 28x + 24$  at  $x = -6$

8)  $f(a) = -5a^2 - 13a + 13$  at  $a = -3$

9)  $f(m) = m^2 - m + 3$  at  $m = 3$

10)  $f(x) = x^3 + x^2 - 28x + 22$  at  $x = -6$