**Extra Credit 17 – 20**

**Extra #17**

**Simplify**

**1.** (5$m^{2}- 2mp-6p^{2})-(-3m^{2}+ 5mp+ p^{2}$)

**2.** 2$x^{2}\left(x-1\right)+ (x+1)^{2}$

**3.** (5x + 4w)(5x – 4w)

**4.** (*x + y*)($x^{2}- 3xy+2y^{2})$

**5.** (n – 3)(n + 4)(n – 1)

**6.** (2x + 3y)(4x – 6y + 7z)

**Extra #18**

**Factor**

**1.** $r^{3}+ 3r^{2}$ *- 54r* **2.** $y^{2}+ 20y+96$ **3.** 4$x^{6}$ - 4$x^{2}$

**4.** 45$x^{2}- 80y^{2}$ **5.** 81$x^{4}- 16$ **6**. 2$x^{3}+ 32x^{2}+ 128x$

**Extra #19**

**Factor**

**1.** 6$n^{2}- 11n-2$ **2.** 21 – 7x + 3y - xy

**3.** $x^{2}$+ 2x – xy – 2y **4.** 36$a^{3}b^{2}+ 66a^{2}b^{3}- 210ab^{4}$

**5.** 5$y^{5}+ 135y^{2}$ **6.** 18$p^{3}- 51p^{2}- 135p$

**Extra #20**

1.$\sqrt{x^{2}+ 10x+25}$ **2.** $\sqrt[3]{-64r^{6}w^{15}}$

**3.** $\sqrt{49m^{2}t^{8}}$ **4.** $\sqrt[5]{-32x^{5}y^{10}}$

**5.** - $\sqrt{144m^{8}n^{6}}$ **6.** - $\sqrt{49a^{10}b^{16}}$