Name: _____ Hour: _____

2/26 Hour Sub Assignment – DUE AT THE END OF THE HOUR – No Work = No Credit

Part 1: (a) Find the zeros (b) State any multiples and give their multiplicities (If there are no multiples say so...) (c) Sketch a graph of the polynomial

1) $y = x^2(x+1)(x-2)^3$	2) $y = -x(x+4)(x-4)$
3) $y = x^3(x+5)$	4) $y = (-x+3)(x+1)(x-6)^3$

5) $y = (x-3)^2(x+1)^3$

6) $y = -(x+8)(x-5)^4(x+2)$

7) $y = -2x(x+5)^2$

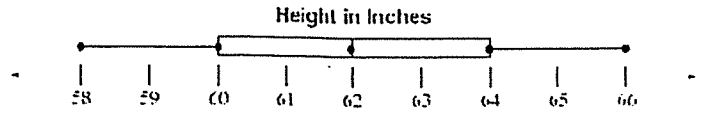
8) $y = (x+2)(x+1)^2(x-4)(x-2)^2(6x-2)$

Part 2: Factor *completely*... Hint: That means factor out the GCF and then factor what's leftover...

9) $4x^6 - 4x^5 - 48x^4$	10) $10x^3 - 10x$	11) $3x^5 - 12x^3$
12) $2x^4 + 8x^3 - 90x^2$	13) $3x^5 - 42x^4 - 96x^3$	14) $2x^3 + 20x^2 + 42x$
15) $8x^3 - 24x^2 + 10x$	16) $12x^4 - 15x^3 - 18x^2$	17) $24x^6 + 30x^5 + 6x^4$

Part 3: Find the 5 number summary and then use it to construct a box and whisker plot for the following data sets.

18)



a)

Min = **Q1 =** **Med =** **Q3 =** **Max =**

b) The numbers you listed above are called the:

c) What percentage of data is located between the median and Q3?

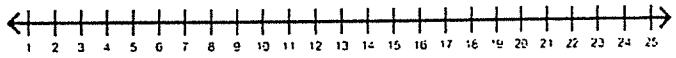
d) What percentage of data falls between Q1 and Q3?

e) What percentage of data falls between the minimum and Q3?

19)

23, 10, 4, 6, 15, 18, 24, 5, 22, 7, 9, 14, 2

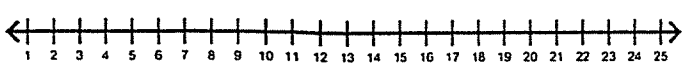
Min = **Q1 =** **Med =** **Q3 =** **Max =**



20)

18, 9, 8, 22, 3, 17, 25, 6, 7

Min = **Q1 =** **Med =** **Q3 =** **Max =**



21)

25, 41, 36, 34, 38, 48, 50, 31, 27

Min = **Q1 =** **Med =** **Q3 =** **Max =**