Math IIIA Name_____

1.3 Preparing to Factor

Period____

Put the quadratics in standard form and find a,b and c.

1) $6k^2 - 31k + 28 = 0$

2) $15v^2 + 44v + 21 = 0$

3) $x^2 - 6x - 7 = 0$

4) $n^2 + 4n - 21 = 0$

5) $n^2 - n = 56$

6) $x^2 + 4x = 5$

7) $n^2 - 6n = -8$

8) $x^2 = 5x$

9) $5k^2 - 56 = 27k$

10) $3b^2 = -16 - 14b$

Factor out the greatest common factor (GCF)

11) $x^3 - 4x^2 + 3x$

12) $x^3 - 2x^2 - 8x$

13) $x^3 - 6x^2 + 5x$

14) $x^3 - 10x^2 + 25x$

15) $2v^3 - 16v^2$

16) $3x^2 + 45x + 150$

Find AxC and B. Then list two numbers that multiply to AxC and add to B.

17) $b^2 + 12b + 35 = 0$

18) $n^2 + 11n + 24 = 0$

19) $5n^2 - 21n - 20 = 0$

20) $5p^2 + 22p + 8 = 0$

21) $-16 = -18x - 9x^2$

22) $4r^2 - 21r - 20 = -r^2$