Secondary Math 2 Name_____

3.2 Factoring Quadratic Trinomials part 1

Date_____ Period____

Factor by Grouping.

1) $5x^3 - x^2 - 25x + 5$

2) $7k^3 - 21k^2 + 8k - 24$

3) $42m^3 + 7m^2 - 48m - 8$

4) $8x^3 + 4x^2 - 14x - 7$

Fill in the blank with the answer that makes the two expressions equivalent

5) $x^2 +$ ____ $+ 16 = (x + 8)(x + 2)$

6) $x^2 +$ ____ $-10 = (x + 10)(x - 1)$

Factor each completely.

7) $6x^2 - 8x$

8) $7n^2 - 64n - 60$

9) $3x^2 - 40x + 100$

10) $28m^2 + 132m + 80$

11) $4a^2 - 19a + 12$

12) $3k^2 - 19k + 20$

13) $v^2 + 18v + 80$

14) $10n^2 + 37n + 7$

15) $3x^2 - 3x - 6$

16) $5k^2 - k - 6$

17) $21p^2 + 3p$

18) $2k^2 + 11k + 14$