Math II Name_____ ID: 1

Factoring Out a Common Term of a Polynomial

Date_____ Period____

Factor the common factor out of each expression.

1) $15x - 3$

2) $v^2 + 2v$

3) $12x^2 - 8x$

4) $5n^4 - 5n^3$

5) $2r^2 - 2r$

6) $6n^3 - 8n$

7) $15n^7 + 6n$

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

9) $10k - 5$

10) $3p^2 + 3p$

11) $2x^4 - 8x^2 + 2x$

12) $20n^2 - 5n + 25$

13) $6n^7 - 9n^4 - 6n^3$

14) $15x^5 + 12x + 3$

15) $10n^2 + 6n + 4$

16) $25n^5 - 5n^3 + 20n$

17) $2r^2 - 2r + 6$

18) $20v^3 + 8v^2 + 8v$

19) $4x^5 - 8x^4 + 8x^3$

20) $8v^4 + 20v^2 + 20v$

Extra Example
(using #8 as an example)

1. Break down each term into its smallest factors.

(2 2 3 x x x + 3 x x)

2. Take out any factors that each term have in common.

(2 2 3 x x x + 3 x x)

3 x x (2 2 x + 1)

REMEMBER if you take out all the common factors, you have to still put a "1"

3. Simplify

$3x^2(4x+1)$