9.4 Multi-Step Factoring

NAME:_____

Corrective

DATE:_____

Answer the following. Justify your answer by showing work!

1. Is $3(2x-5)(x+3)$ the factored form of $6x^2-3x-45$?	2. Is $x(4x+3)(2x-7)$ the factored form of $8x^3-22x^2-21x$?
3. Is $2(3h+4)(3h-4)$ the factored form of $12h^2-16$?	4. Is $-(7p+5)(3p+2)$ the factored form of $-21p^2-29p-10$?

Factor the following if possible. Check your answer by multiplying!

5. $3x^2+9x-30$	6. $2x^2-18$	7. $12x^3+17x^2-5x$
8. p^3-4p^2+3p	9. $8n^2-34n+8$	10. $12d^3-27d$

Solve the following by factoring.

11. $2x^2 + 12x = -16$	12. $3m^3 + 5m^2 = 2m$
13. $18x^2 = 2x^3 + 40x$	14. $30d^2 - 55d = -15$
15. $5y^2 - 25y = 0$	16. $0 = 9f^3 - 63f^2 + 54f$

ANSWERS TO CORRECTIVE ASSIGNMENT

1. NO	2. YES	3. NO	4. YES
5. $3(x-2)(x+5)$	6. $2(x+3)(x-3)$	7. $x(4x-1)(3x+5)$	8. $p(p-1)(p-3)$
9. $2(n-4)(4n-1)$	10. $3d(2d+3)(2d-3)$	11. $x = -4, -2$	12. $m = -2, 0, \frac{1}{3}$
13. $x = 0, 4, 5$	14. $d = \frac{1}{3}, \frac{3}{2}$	15. $y = 0, 5$	16. $f = 0, 1, 6$