

Factoring Practice- Extra Credit

Date _____ Period _____

Factor each.

1) $f(x) = x^4 + 8x$

2) $f(x) = x^3 - 125$

3) $f(x) = x^8 - 29x^4 + 100$

4) $f(x) = x^8 - 26x^4 + 25$

5) $f(x) = x^3 + 8$

6) $f(x) = x^4 - 2x^3 - 3x^2 + 6x$

7) $45m^3 - 60m^2 - 30m + 40$

8) $210p^3 - 245p^2 - 336p + 392$

9) $48x^3 - 8x^2 - 336x + 56$

10) $4p^3 + 28p^2 - 16p - 112$

Answers to Factoring Practice- Extra Credit

- 1) $f(x) = x(x+2)(x^2 - 2x + 4)$ 2) $f(x) = (x-5)(x^2 + 5x + 25)$
3) $f(x) = (x^2 - 2)(x^2 + 2)(x^2 - 5)(x^2 + 5)$ 4) $f(x) = (x^2 - 5)(x^2 + 5)(x-1)(x+1)(x^2 + 1)$
5) $f(x) = (x+2)(x^2 - 2x + 4)$ 6) $f(x) = x(x-2)(x^2 - 3)$ 7) $5(3m^2 - 2)(3m - 4)$
8) $7(5p^2 - 8)(6p - 7)$ 9) $8(x^2 - 7)(6x - 1)$ 10) $4(p-2)(p+2)(p+7)$