

**Algebra 2 Honors****2-4 Extra Problems****Factor completely:**

1.  $3x^4 + 3x^2 - 6$

2.  $9x^4 - 18x^2 + 8$

3.  $16x^4 - 8x^2 + 1$

4.  $x^{2n} - 10x^n + 25$

4.  $5x^3 - 405x$

6.  $2x^4 - 32$

7.  $x^2 + 14x + 49 - y^2$

8.  $(x-1)^2 - 14(x-1) + 40$

9.  $x^4 + 5x^2 - 84$

10.  $25x^4 - 30x^2 + 9$

11.  $2x^{2n} + 9x^n - 5$

12.  $5x^{16} - 80y^{16}$

13.  $4x^8 - 12x^4y^3 + 9y^6$

14.  $16 - (x^2 - 2x + 1)$

15.  $18x^4 + 12x^2 - 16$

16.  $(x+3)^2 - 4(x+3) - 21$

**Factor by completing the square:**

17.  $x^2 - 40x + 384$

18.  $x^2 - 22x - 968$

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