

**Lesson #10 B-2: Factoring Complex Polynomials Review**  
**(Reference: Lesson #23 & 61 in book)****Problem**

1. Please fully factor each of the following Polynomials using the techniques learned in the previous factoring lessons.

1.  $2x^4 - 16x^3 + 30x^2$

2.  $108x^{12}y^{11}z^5 + 32x^9y^{11}z^2$

3.  $81x^8y^5 - 100x^6y^7$

4.  $60x^5yz^7 + 100x^4y^2z^7 - 135x^3yz^7 - 225x^2y^2z^7$

5.  $12x^8y^4 + 6x^7y^5 - 36x^6y^6$

6.  $36x^6y^8 + 180x^5y^8z + 225x^4y^8z^2$

7.  $6x^3y - 36xy - 50x^2y$

8.  $128x^5y + 54x^2y^4$

9.  $36x^3y^2z^5 + 18x^2y^2z^6 - 108xy^2z^7$

10.  $98x^{10}y^3z^5 - 242x^8y^3z^7$

11.  $81x^7y^6z^3 - 192x^4y^3z^3$

12.  $50xy^4 + 80x^2y^3 + 32x^3y^2$

13.  $9x^3y^6 + 18x^3y^5z + 12x^3y^5 + 24x^3y^4z$

14.  $2x^5 + 6x^4y - 36x^3y^2$

15.  $121z^2 + 110z + 100$

16.  $90x^3y^3z^8 - 6x^2y^4z^9 - 12xy^5z^{10}$

17.  $64x^4y^4 - 48x^3y^5 + 9x^2y^6$

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18.  $81x^3yz^2 - 27x^3z^2 + 27x^2yz^2 - 9x^2z^2$