**Task 1: How to Factor a DOS**

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| Go to http://t1.gstatic.com/images?q=tbn:ANd9GcScy7LsBXdnU0ZXuyZawDGiuEWyk6-YmHd5yWV15gkzkDqVa77DyQ**bit.ly/howtofactorDOS** |

* Complete the activity by following the instructions.
* Complete the blanks in the box below as you progress through the activity.
* When you are told to “Grab some paper and a pencil and factor the following problems”, complete the work below BEFORE you click to get the answer. Use the website to check your answers, NOT copy them down.

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| **Difference of Squares** * A **perfect square** is the result of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ *EG:*
* Variables can also be perfect squares. A variable raised to an \_\_\_\_\_\_\_\_\_\_\_\_ power is a perfect square.
	+ *EG:*

***Recall:*** To factor a polynomial is to write the polynomial as the product of two or more polynomials.In order to factor using the ***difference of two perfect squares***, three conditions must be met. The conditions are:1.

*EG:*  **Formula:** * Square root each term
* In one bracket put a +, in the other bracket put a –.
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* **NOTE**: Not all of the expressions can be factored, because not all of them are a difference of squares. If they’re not possible, please write ‘NP’, and explain why not.
1. *x*2 – 64 2. *x*2 – 10

= =

3. 4*x*2 – 25 4. *x*4 – 1

 = =

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5. *x*8 + 16 6. *x*12 – y8

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**Task 2: More Practice**

* Put away your device now.

Factor each expression. If not possible, please write ‘NP’, and explain why not.

7. 4*x*2 – 9 8. *x*2 – 49*y*2

 = =

9. 9*x*2 – 1 10. 4*x*2 + 81

 = =

11. 16*x*2 – 3 12. *x*4 – 25

 = =

13. 2*x*2*y* – 18*y* 14. *x*4 – 16

 = =

 = =

