## Sum of Squares, Sum of Cubes Difference of Squares, Difference of Cubes

To find the factors for $x^{2}+y^{2}, x^{3}+y^{3}, x^{2}-y^{2}, x^{3}-y^{3}$, fill out the outside of these multiplication rectangles. You need not do these in order. Not all are possible.

| $x^{2}$ |  |
| :--- | :--- |
|  | $+y^{2}$ |


| $\mathrm{x}^{3}$ |  |  |
| :---: | :---: | :---: |
|  |  | $+\mathrm{y}^{3}$ |


| $x^{2}$ |  |
| :--- | :--- |
|  | $-y^{2}$ |


| $\mathrm{x}^{3}$ |  |  |
| :---: | :--- | :--- |
|  |  | $-\mathrm{y}^{3}$ |

