$\qquad$

## Algebra 1B Discovery activity on difference of perfect squares

A) Factor the following trinomials. Remember to check if there is a GCF first, and then do the X.

1) $25 x^{2}-0 x-4$
2) $16 x^{2}+0 x-9$
3) $x^{2}+0 x-36$
4) $8 x^{2}-0 x-18$
B) Can you rewrite the trinomials above without one of the terms? If so, which one, and why? Would that change the answer?
C) Now, rewrite the trinomials from "A" without the term that you mentioned in "B", and write the answer to the right that you found on A .

| Polynomial from A rewritten | Answer for the polynomial from A |
| :--- | :--- |
| 1) |  |
| 2) |  |
| 3$)$ |  |
| 4) |  |

D) What do you notice about the numbers in the polynomials rewritten?
E) What do you notice about the numbers in the answers?
F) In your own words, try to explain a shortcut that could use so that you will not have to go through the entire factorization process in these types of problems.

