

## Notes 9-4

### Multiplying Special Cases

\*\* Be careful! You cannot "distribute" an exponent over addition, you must always multiply the base by itself as many times as the exponent indicates.

**Ex. 1:** Find each square (do not show work!).

a)  $(t+6)^2 = t^2 + 12t + 36$

b)  $(7m-2p)^2 = 49m^2 - 28mp + 4p^2$

\*\*These products have a special name, Perfect Square Trinomial.

**Ex. 4:** Find each product (do not show work!).

a)  $(d+11)(d-11) = d^2 - 121$

b)  $(9v^3 + w^4)(9v^3 - w^4) = 81v^6 - w^8$

\*\* These products are known as the Difference of Squares.

\*\*These rules MUST be memorized so no work is shown to receive credit.\*\*