7.2B Factoring the Difference of Perfect Squares DIFF or DOS

***A perfect square **SUBTRACT** a perfect square

Example: Factor $x^2 - 81$

STEPS to Factoring DIFF
1) set up 2 pair of ()
2) split the 1st term into its perfect squares
3) split the 2nd term into its perfect squares
4) separate 1 set of terms with a '+' and the other with a '-'

1) $s^2 - 49$

2) $r^2 - 16$

3) $25m^2 - n^2$

4) $r^2s^2 - 144$

5) $16a^6 - 4b^4$

6) $36 - x^4$

7) $25y^2 - 12$

7.2B FactoringDIFF

7) $\frac{1}{49}s^2 - \frac{4}{9}t^8$

8) $4x^2 + 33b^2$

Class Review:

$x^2 - 225$

$16 - 25x^2$

$4x^2 + 81$