Name:

## Date:

Topic:
Class:

| Main Ideas/Questions | Notes/Examples |  |  |
| :---: | :---: | :---: | :---: |
| ADDING \& SUBTRACTING RADICALS | (1) | SIMPLIFY all radicals. |  |
|  | (2) | Identify radicals with the SAME INDEX and SAME RADICAND. Only these can be combined! |  |
|  | (3) | For common radicals, add/subtract the coefficients and KEEP THE COMMON RADICAL. |  |
|  | EXAMPLE $\quad-2 \sqrt{20}-2 \sqrt{5}$ |  |  |
| More Examples | Directions: Find each sum or difference. Make sure you simplify FIRST! |  |  |
|  | 1. $3 \sqrt{ }$ | $\overline{6}-2 \sqrt{6}$ | 2. $2 \sqrt{5}+2 \sqrt{5}$ |
|  | 3. 10 | $\sqrt{7}+2 \sqrt{63}$ | 4. $\sqrt{15}-6 \sqrt{60}$ |
|  | 5. $2 \sqrt{ }$ | $\sqrt{32}-3 \sqrt{18}$ | 6. $-4 \sqrt{28}+4 \sqrt{112}$ |
|  | 7. -4 | $\sqrt{160}-2 \sqrt{90}$ | 8. $4 \sqrt{45}+3 \sqrt{245}$ |

