Name:

Date: _____

Adding and Subtracting Radicals Notes

To add or subtract radicals, combine	e like	terms	_!
Make sure all radicals are <u>Simpl</u>	whied thirst!	(radical	5).

Add / subtract the numbers in <u>hont</u> of the radicals (ike terms only!). (Keep radicals the same).

Example 1 – Like Radicals

- $2\sqrt{5} + 3\sqrt{5}$
- a) Add the numbers in front of the radical.

_2+3=5

b) Keep same radical (keep like terms).

$$2\sqrt{5} + 3\sqrt{5} = \underline{515}$$

Example 2 - Unlike radicals:

$$3\sqrt{3} - 4\sqrt{2} + \sqrt{3} + 7\sqrt{2}$$

a) Group like radicals.



b) Add numbers in front of like radicals.

43+32

Example 3 – Simplify Radical First, then add or subtract:

$\sqrt{8}$ - $\sqrt{5}$ + 4 $\sqrt{2}$

a) Simplify $\sqrt{8}$.

1412 = 212

b) Group like radicals.



c) Add the numbers in front of like radicals.

612-15

Example 4 – Simplify Radical First, then add or subtract:

$$10\sqrt{27} - \sqrt{3} - 4\sqrt{75}$$

a) Simplify $\sqrt{27}$.

b) Simplify $\sqrt{75}$.

-4[25[3=-4.5[3=-2013

c) Group like radicals.

d) Add the numbers in front of like radicals.