Add/Subtract

IV. Answer Key

1. $8\sqrt{2}$

2. $-3\sqrt{5}$

3. $4\sqrt{3} - \sqrt{5}$

4. $9\sqrt{13}$

5. $2\sqrt{6} - 6\sqrt{5} + 3\sqrt{3}$

6. $6\sqrt{35} + 20\sqrt{5} - 8\sqrt{7}$

7. $4\sqrt{5} + 5\sqrt{3} - 6\sqrt{2}$

8. $32\sqrt{3} - \overset{22}{36}\sqrt{7} \longrightarrow$

9. $-21\sqrt{2} + \overset{41}{31}\sqrt{3}$

10. $-4\sqrt{5}$

11. $3\sqrt{5} + 4\sqrt{2} + 6\cancel{\sqrt{10}}\ 2\sqrt{30}$

12. $\cancel{7\sqrt{3} - 7\sqrt{5}}\ 2\sqrt{33} - 7\sqrt{5} + 32\sqrt{2}$

13. 0

14. $8\sqrt{3} + 7\sqrt{5} + 4\sqrt{15}$

15. $-\sqrt{11} - 6\sqrt{2} + 14\sqrt{3}$

16. $54\sqrt{6} + \sqrt{10}$

17. $70\sqrt{14} + \boxed{12\sqrt{3}}\ -6\sqrt{3} - 6\sqrt{2}$

18. $7\sqrt{5} - \sqrt{10}$

19. $36 + 4\sqrt{35}$

20. $9\sqrt{2} - 14\sqrt{30} + 3\sqrt{5}$ ✓

21. $18 + 2\sqrt{21}$

22. $13\sqrt{2} + 2\sqrt{85}$

23. $20\sqrt{2} + 8\sqrt{5}$

24. Actual answer is $9\sqrt{5}$; add the coefficients, but do not add the radicands.

25. No, need to simplify the radicals before comparing the radicands.

$$6\sqrt{208} + 7\sqrt{117}$$
$$24\sqrt{13} + 28\sqrt{13}$$
$$52\sqrt{13}$$