

Math 173 – Radicals Review

Simplify the following radicals. If they are already simplified, then leave as is.

1. $\sqrt{81}$

8. $\sqrt{54}$

2. $\sqrt{49}$

9. $\sqrt{37}$

3. $\sqrt{169}$

10. $\sqrt{19}$

4. $\sqrt{121}$

11. $\sqrt{125}$

5. $\sqrt{18}$

12. $\sqrt{400}$

6. $\sqrt{24}$

13. $\sqrt{50}$

7. $\sqrt{32}$

14. $\sqrt{12}$

Rationalize the following radicals.

15. $\frac{1}{\sqrt{2}}$

21. $\sqrt{\frac{2}{7}}$

16. $\frac{3}{\sqrt{5}}$

22. $\sqrt{\frac{5}{2}}$

17. $\frac{\sqrt{2}}{\sqrt{6}}$

23. $\sqrt{\frac{12}{18}}$

18. $\frac{1}{\sqrt{12}}$

24. $\sqrt{\frac{2}{98}}$

19. $\frac{5}{\sqrt{43}}$

25. $\sqrt{\frac{7}{72}}$

20. $\frac{3}{\sqrt{23}}$

26. $\sqrt{\frac{12}{21}}$

Solutions

1. 9

2. 7

3. 13

4. 11

5. $3\sqrt{2}$

6. $2\sqrt{6}$

7. $4\sqrt{2}$

8. $3\sqrt{6}$

9. $\sqrt{37}$

10. $\sqrt{19}$

11. $5\sqrt{5}$

12. 20

13. $5\sqrt{2}$

14. $2\sqrt{3}$

15. $\frac{\sqrt{2}}{2}$

16. $\frac{3\sqrt{5}}{5}$

17. $\frac{\sqrt{3}}{3}$

18. $\frac{\sqrt{3}}{6}$

19. $\frac{5\sqrt{43}}{43}$

20. $\frac{3\sqrt{23}}{23}$

21. $\frac{\sqrt{14}}{7}$

22. $\frac{\sqrt{10}}{2}$

23. $\frac{\sqrt{6}}{3}$

24. $\frac{1}{7}$

25. $\frac{\sqrt{14}}{12}$

26. $\frac{2\sqrt{7}}{7}$