

Name: _____

Date: _____

**Dividing Radicals
Practice 3**



Divide and Simplify.

1. $\sqrt{\frac{12}{9}}$

2. $\sqrt{\frac{45}{4}}$

3. $\sqrt{\frac{36}{4}}$

4. $\frac{\sqrt{75}}{\sqrt{25}}$

5. $\frac{\sqrt{100}}{\sqrt{121}}$

6. $\sqrt{\frac{100a^2}{144b^2}}$

7. $\sqrt{\frac{3a^2}{100b^2}}$

8. $\sqrt{\frac{x^2}{y^2}}$

9. $\sqrt{\frac{75bc^2}{a^2}}$

10. $\sqrt{\frac{12}{b^2}}$

11. $\sqrt{\frac{45}{4m^2}}$

12. $\sqrt{\frac{2}{100}}$

Divide. Write all answers in simplified radical form.
Hint: Rationalizing the Denominator.

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

14. $\sqrt{\frac{1}{6}}$

15. $\sqrt{\frac{4}{5}}$

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

17. $\sqrt{\frac{18}{7}}$

18. $\frac{\sqrt{75}}{\sqrt{3}}$

19. $\sqrt{\frac{4}{3}}$

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

21. $\sqrt{\frac{4h}{5}}$

22. $\frac{\sqrt{8}}{\sqrt{6}}$

23. $\sqrt{\frac{122}{a}}$

24. $\frac{\sqrt{8}}{\sqrt{b}}$

Divide. Write all answers in simplified radical form.

Hint: Simplify the radical before rationalizing the denominator.

25. $\sqrt{\frac{5}{12}}$

26. $\frac{\sqrt{9}}{\sqrt{18}}$

27. $\frac{\sqrt{8}}{\sqrt{24}}$

28. $\frac{8}{\sqrt{8}}$

29. $\sqrt{\frac{4y}{3y^2}}$

30. $\frac{\sqrt{2}}{\sqrt{12}}$

31. $\frac{\sqrt{3}}{2\sqrt{8}}$

32. $\sqrt{\frac{n}{12}}$

33. $\sqrt{\frac{9ab}{4ab^2}}$

34. $\sqrt{\frac{5}{32}}$

35. $\frac{\sqrt{3k}}{\sqrt{8}}$

36. $\sqrt{\frac{18}{x}}$

Evaluate: Write all answers in simplified radical form.

37. $\sqrt{\frac{2}{5}} \cdot \sqrt{\frac{6}{5}}$

38. $\sqrt{\frac{3}{4}} \cdot \sqrt{\frac{5}{2}}$

39. $\sqrt{\frac{5}{7}} \cdot \sqrt{\frac{2}{5}}$

40. $\sqrt{\frac{6}{7}} \cdot \sqrt{\frac{1}{3}}$

41. $\sqrt{\frac{1}{4}} \cdot \sqrt{\frac{6}{5}}$

42. $\sqrt{\frac{1}{2}} \cdot \sqrt{\frac{5}{2}}$

43. $\sqrt{\frac{5}{7}} \cdot \sqrt{\frac{1}{10}}$

44. $\sqrt{\frac{4}{7}} \cdot \sqrt{\frac{1}{3}}$

45. $\sqrt{\frac{3}{4}} \cdot \sqrt{\frac{4}{5}}$

46. $\sqrt{\frac{1}{7}} \cdot \sqrt{\frac{7}{11}}$

47. $\sqrt{\frac{1}{2}} \cdot \sqrt{\frac{1}{2}}$

48. $\sqrt{\frac{3}{10}} \cdot \sqrt{\frac{1}{10}}$