

Extra Practice**13.2**

Name _____

In 1–12, simplify the radical expression.

1. $\sqrt{80}$

2. $\sqrt{98}$

3. $\sqrt{54}$

4. $\sqrt{\frac{16}{25}}$

5. $3\sqrt{\frac{1}{9}}$

6. $\sqrt{\frac{3}{25}}$

7. $\sqrt{\frac{20}{49}}$

8. $2\sqrt{\frac{18}{36}}$

9. $\sqrt{\frac{4}{8}}$

10. $\sqrt{\frac{64}{18}}$

11. $5\sqrt{\frac{1}{3}}$

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

In 13–24, perform the indicated operation and simplify your result.

13. $\sqrt{6} \cdot \sqrt{3}$

14. $\sqrt{14} \cdot \sqrt{6}$

15. $\sqrt{5} \cdot \sqrt{10}$

16. $(3\sqrt{7})^2$

17. $\left(\frac{1}{3}\sqrt{5}\right)^2$

18. $(2\sqrt{10})^2$

19. $\left(\frac{3}{4}\sqrt{8}\right)^2$

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

21. $\frac{8}{\sqrt{2}}$

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

23. $\frac{1}{\sqrt{20}}$

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