Rationalizing Radical Expressions - Key

In problems 1-12, rationalize each denominator. Assume all variables are positive.

1. $\frac{3\sqrt{5}}{5}$	2. $\frac{7\sqrt{2}}{4}$
3. $\frac{5\sqrt{6}}{12}$	4. $\frac{\sqrt{15}}{5}$
5. $\frac{\sqrt{3x}}{x}$	6. $\frac{x^2\sqrt{xy}}{y^3}$
7. $\sqrt[5]{81}$	8. $\frac{\sqrt[7]{2x^6}}{x}$
9. $\frac{-\sqrt[3]{9}}{6}$	10. $\frac{3\sqrt[5]{2x^3}}{2x}$
11. $\frac{-2\sqrt[4]{9x^3y^2}}{3xy}$	12. $\frac{\sqrt[7]{x^5y^3}}{xy}$

In problems 13-18, rationalize each denominator. Assume all variables are positive.

13. $5\sqrt{2}+5$	14. $\frac{42-7\sqrt{3}}{33}$
15. $2\sqrt{5}+\sqrt{10}$	16. $\sqrt{15}+\sqrt{10}$
17. $\frac{x^2+x\sqrt{xy}}{x-y}$	18. $\frac{48\sqrt{2}-80\sqrt{7}}{-157}$