

## Algebra 1

Name \_\_\_\_\_

Practice- Simplify each expression fully!

1. $\frac{\sqrt{200}}{10\sqrt{2}}$	2. $\frac{\sqrt{45}}{3\sqrt{5}}$	3. $\frac{\sqrt{112}}{4\sqrt{7}}$
4. $\frac{\sqrt{400d}}{20\sqrt{d}}$	5. $\frac{\sqrt{9y^2}}{3y}$	6. $\frac{\sqrt{25n^3}}{5n\sqrt{n}}$
7. $\frac{\sqrt{3} \cdot \sqrt{21}}{\sqrt{63}}$ $3\sqrt{7}$	8. $\frac{\sqrt{20} \cdot \sqrt{15}}{\sqrt{300}}$ $10\sqrt{3}$	9. $\frac{\sqrt{10x} \cdot \sqrt{2x}}{\sqrt{20x^2}}$ $2x\sqrt{5}$
10. $10\sqrt{7} + 3\sqrt{7}$ $13\sqrt{7}$	11. $2\sqrt{27} + 3\sqrt{40} - 5\sqrt{48}$ $6\sqrt{3} + 6\sqrt{10} - 20\sqrt{3}$ $-14\sqrt{3} + 6\sqrt{10}$	12. $\frac{\sqrt{124m^4n^{10}}}{2m^2n^5\sqrt{31}}$
13. $\frac{4xy\sqrt{300xy^4}}{40xy^3\sqrt{3x}}$	14. $\frac{5\sqrt{8} + \sqrt{98} - 2\sqrt{18}}{10\sqrt{2} + 7\sqrt{2} - 6\sqrt{2}}$ $11\sqrt{2}$	15. $\frac{-3xy^2\sqrt{16x^2y^2}}{-3xy^2(4xy)}$ $-12x^2y^3$
16. $\frac{-4\sqrt{490}}{-28\sqrt{10}}$	17. $\frac{2x\sqrt{27x} + 75\sqrt{x} + 5x\sqrt{12x}}{6x\sqrt{3x} + 5\sqrt{3x} + 10x\sqrt{3x}}$ $16x\sqrt{3x} + 5\sqrt{3x}$	

