

Key

## MONOMIAL SQUARE ROOTS

Simplify the following square roots:		
1. $\sqrt{x^2} = x$	2. $\sqrt{m^6} = m^3$	3. $\sqrt{9k^2} = 3k$
4. $\sqrt{64p^4} = 8p^2$	5. $\sqrt{100x^2y^2} = 10xy$	6. $\sqrt{49a^2b^6c^4} = 7abc^2$

**\*\* NOTE:** It is only possible to take the square root of variables with \_\_\_\_\_ exponents!

Simplify the following non-perfect square roots:	
7. $\sqrt{y^5}$ $\sqrt{y^4} \sqrt{y}$ $y^2 \sqrt{y}$	8. $\sqrt{a^2b^3}$ $\sqrt{a^2} \sqrt{b^2} \sqrt{b}$ $ab\sqrt{b}$
9. $\sqrt{x^2y^3z^4}$ $\sqrt{x^2} \sqrt{y^2} \sqrt{z^4} \sqrt{y}$ $= xy z^2 \sqrt{y}$	10. $\sqrt{45n^4}$ $\sqrt{9} \sqrt{5} \sqrt{n^4}$ $3n\sqrt{5}$
11. $\sqrt{144r^3}$ $\sqrt{144} \sqrt{r^2} \sqrt{r}$ $12r\sqrt{r}$	12. $\sqrt{81c^7d^4}$ $\sqrt{81} \sqrt{c^6} \sqrt{d^4} \sqrt{c}$ $9c^3d^2\sqrt{c}$
13. $\sqrt{100x^5y^2}$ $\sqrt{100} \sqrt{x^4} \sqrt{y^2} \sqrt{x}$ $10x^2y\sqrt{x}$	14. $\sqrt{49a^3b^6c^4}$ $\sqrt{49} \sqrt{a^2} \sqrt{b^6} \sqrt{c^4} \sqrt{a}$ $7abc^2\sqrt{a}$
15. $\sqrt{8x^6}$ $\sqrt{4} \sqrt{x^6} \sqrt{2}$ $2x^3\sqrt{2}$	16. $\sqrt{50x^2}$ $\sqrt{25} \sqrt{x^2} \sqrt{2}$ $5x\sqrt{2}$

