**HM3 CLASSWORK– SIMPLIFYING AND VERIFYING NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

***Simplify:***

1. sec $θ$ cos $θ$ 2. cot x sin x 3. sin $θ$ sec $θ$

4. sec2 x tan2 x + sec2 x 5. tan4 x + 2 tan2 x + 1 6. sec2 $θ$ (1 – sin2 $θ$)

7. sec $θ$ ($\frac{\sin(θ)}{\tan(θ)})$ 8. $\frac{ \cos(x)}{1+\sin(x) }+\frac{1+\sin(x) }{\cos(x) }$

***Verify:***

9. $\frac{tan^{2}ϑ+1}{cotϑ}=tanϑsec^{2}ϑ$ 10. $\frac{secϑ-1}{secϑ}=1-cosϑ$

11. $cscϑtanϑ+cosϑ=\frac{1+cos^{2}ϑ}{cosϑ}$ 12. $-cosϑcscϑ=-cotϑ$