**WORKSHEET XX**

Integration of Trig functions

1. Integrate each of the following functions of sine x and cosine x:













2. Integrate each of the following functions of secant x and tangent x:

















3. Integrate each of the following functions by completing the square, if necessary.









4*.* By making an appropriate trig (or hyperbolic) substitution, convert each of the following integrals to trig integrals.









5. Using an appropriate trig identity, evaluate each of the following trigonometric integrals:





*There was a young fellow called Dan,*

 *Who knew all about sin, cos and tan.*

 *He talked rather big*

 *Of his knowledge of trig –*

 *He did seem a clever young man.*

 – Anonymous



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