**Trigonometric Identities Quiz**

1. **Fill in the missing side of each identity then verify using your notes:**

**Reciprocal Identities The Pythagorean Identity (and rearranged)**

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 **Other Pythagorean Identities**

**Quotient Identity **

** Compound Formulas**

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 **Double Angle Formulas**

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1. **Use compound angle formulas to determine the exact value of the following.**
2. $cos\left(\frac{5π}{12}\right)$ **b)** $sin\left(\frac{13π}{12}\right)$
3. **Use a double angle formula to evaluate the following:**
4. $tan\left(\frac{2π}{3}\right)$ **b)** $cos\left(\frac{3π}{2}\right)$
5. **Prove the following Identities:**
6. $\frac{1+sinθ}{1-sinθ}=\left[tanθ+\frac{1}{cosθ}\right]^{2}$ **b)** $\frac{1-2cos^{2}θ}{sinθcosθ}=tanθ-cotθ$
7. **Use a double angle formula to determine the exact value of** $sin\left(\frac{π}{8}\right)$ **given** $cos\left(\frac{π}{4}\right)=\frac{\sqrt{2}}{2}$**.**
8. **Solve the following trigonometric equations,****:**
9. $2sinθ-\sqrt{3}=0$ **b)** $2cos\left(2θ\right)-1=0$