Group: _____          Present:_____

1. Simplify $\cos(\theta) + \sin(\theta)\tan(\theta)$.

   $\cos(\theta) + \sin(\theta)\tan(\theta) =$

   Conclusion: _____ is an identity.

2. Substitute $x = a\tan(\theta)$ into $\frac{1}{\sqrt{a^2+x^2}}$, and simplify (for $-\frac{\pi}{2} < \theta < \frac{\pi}{2}, a > 0$)

   Answer: $\frac{1}{\sqrt{a^2+x^2}} =$ _____