Homework: Worksheet # 1a, 3ad, 4ac, 5ad, 6ab, 8a, 10ac, 13a, 14ac

**Proving Identities: Part 2**

When proving identities, here are some strategies to consider:

1. Compare both sides of the equation. What is the same? What is different?

2. When proving an identity, it is often strategic to start manipulating the side that is busier.

3. All reciprocal trigonometric ratios (, , and ) can easily be changed to one of

the three primary trigonometric ratios (, , and ).

4. It is usually recommended to change any instance of or to and using:

5. The squared forms of sine and cosine can easily be changed to one another using.

Furthermore, the right side of these identities can be factored as differences of squares.

6. The conjugate of a binomial is the same two-termed expression presented with the opposite

operator in between terms. For example:

🡪 the conjugate of is

🡪 the conjugate of is

The conjugate can be used to complete a difference of squares. For example;

**Examples**

Prove the following:

a)  b) 

c)  d) 