Name: _____   Date: _____

Example Athletes do not compete in both the Summer and Winter Olympics. Clara Hughes has won
two bronze medals in cycling in the Summer Olympics. Therefore, Clara has not participated in the
Winter Olympics.

      Is there an error in this statement?

      What do we need to watch for with proofs?

Example The following is a proof that 1=2:

$$a = b$$
$$a^2 = ab$$
$$a^2 + a^2 = a^2 + ab$$
$$2a^2 = a^2 + ab$$
$$2a^2 - 2ab = a^2 + ab - 2ab$$
$$2(a^2 - ab) = 1(a^2 - ab)$$
$$2 = 1$$

      Can you find the error in the proof?

      What do we need to watch for with proofs?

Assignment   Pg. 42 #2, 4, 6-8, 12, 14, 17

Example Liz claims she has proved that -5 =5.

      Liz's proof:
            I assumed that: -5=5
            Then I squared both sides: $(-5)^2=(5)^2$
            I found that: 25=25 which is true

            Therefore, -5=5

      What is the error in Liz's proof?

      What do we need to watch for in proofs?

Assignment   Pg. 42 #2, 4, 6-8, 12, 14, 17