## Calculating Fractions In The Form: $\frac{b^2}{(b+1)^2-1}$

A. From algebra we learn:

$$\frac{b^2}{(b+1)^2-1} = \frac{b}{b+2}$$

B. Use the following rules:

1. The numerator is simply b.
2. The denominator is b + 2.
3. Reduce the fraction if need be.

Ex [1] $\frac{5^2}{6^2-1}$ = _____ (fraction).

a) Since the b in this case is 5, the numerator is 5 and the denominator is 5 + 2 or 7.

b) The answer is $^5/_7$.

Ex [2] $\frac{8^2}{9^2-1}$ = _____ (fraction).

a) Since the b in this case is 8, the numerator is 8 and the denominator is 8 + 2 or 10.

b) The answer is $^8/_{10}$. However, we must reduce this fraction to $^4/_5$.

c) The final answer is $^4/_5$.