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] $\frac{7^2}{6^2-1}$ = _____ (fraction).

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

Ex [2] $\frac{10^2}{9^2-1}$ = _____ (fraction).

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

b) The answer is $^{10}/_{8}$. However, we must reduce this fraction to $^{5}/_{4}$.

c) The final answer is $^{5}/_{4}$.