## A Simply Conclusion

The ABC's of Number Theory
by Prof. Noam D. Elkies

## Page 69;

Proving that the conjecture is false would require the existence of an infinite family of $(A, B, C)$ 's whose $A B C$ exponents approach a limit greater than 1 , just as we had to construct an infinite family such as ( $1,2^{r}-1,2^{r}$ )...

## Conclusion:

## A 1

B $\quad\left(2^{r}-2\right) * 2^{r}$
C $\quad\left(2^{r}-1\right)^{2}$

Number-Examples:
$2^{2} \quad$ A
1

B
8
$\left(2^{2}-2\right) * 2^{2}$
(2*4)
C $\quad 3^{2}$
9
$2^{3} \quad$ A
1

B
48
$\left(2^{3}-2\right)^{*} 2^{3}$
(6*8)
$\begin{array}{lll}\text { C } & 7^{2} & 49\end{array}$

```
        B 224 (24-2)*\mp@subsup{2}{}{4}}(14*16
        C }1\mp@subsup{5}{}{2225
    rad C C C - 1 (maximum)*1 < C C 
    = rad(ABC) < C infinite.
```

