

# Re: More on triangle numbers and primes!

---

*Source:* <http://sci.tech-archive.net/Archive/sci.math/2005-10/msg03330.html>

---

- *From:* Dan <[30pack@xxxxxxxxxxxxxx](mailto:30pack@xxxxxxxxxxxxxx)>
  - *Date:* Thu, 27 Oct 2005 10:36:34 EDT
- 

>Well, let's do one...

>Is 31 prime ?

> $31 \div 3 = 10$

> $9 \div 3 = 3$

> $10 - 3 = 7$

> $(7 * 3) + 9 = 30$

> $30 + 3 = 33$

>There is not a 31 on row one...

> $31 \div 4 = 7$

> $14 \div 4 = 3$

> $7 - 3 = 4$

> $(4 * 4) + 14 = 30$

> $30 + 4 = 34$

>There is not a 31 on row two...

> $31 \div 5 = 6$

> $20 \div 5 = 4$

> $6 - 4 = 2$

> $(2 * 5) + 20 = 30$

> $30 + 5 = 35$

>There is not a 31 on row three...

> $31 \div 6 = 5$

> $27 \div 6 = 4$

> $5 - 4 = 1$

> $(1 * 6) + 27 = 33$

>There is not a 31 on row four...

>Row five begins with 35 which is greater than 33

>Finished.

>31 is prime

>Of course this out performs trial division when working >with larger numbers  
>but not with small numbers...

Sure, that's how I found the 1,000 nth + prime.

Re: More on triangle numbers and primes!

You are just talking about stopping points here because you had to go through the other primes  $>7$  to get to prime 31. [11,13,17,19,23,29]  
I knew the 1000 nth prime was  $>7000$  but  $<8000$  so my last set I used was [8xxx,n] just to make sure it was high enough for the check. Like your stopping point [35,7] for your prime check 31.

Dan

- 
- Prev by Date: [\*\*Re: infinity ...\*\*](#)
  - Next by Date: [\*\*Re: infinity\*\*](#)
  - Previous by thread: [\*\*Re: More on triangle numbers and primes!\*\*](#)
  - Next by thread: [\*\*Locus of  \$z\(z+c\)\$  for  \$|z|=1\$  \( \$z\$  complex\) and an optical phenomenon\*\*](#)
  - Index(es):
    - ◆ [\*\*Date\*\*](#)
    - ◆ [\*\*Thread\*\*](#)