Free to use it

for any any three integers
a, b, c, if a | b and a divides c
then a | (b - c)

b = am

c = an

b - c = am - an = a(m - n)

p + 1, p + 1

(2) 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41,
43, 47, 51, 53, 57, 59, 61, 67, 71, 73, 7
83, 89, 97, 101, 103, 107, 109, 113, 127, 13
137, 134

3 0008
^
3 1001
/ \
7 143
/ \
11 13

(4) $4 / (\ln(4-1))$

$e^{100} / (\ln(e^{100} - 1))$

$2.6\,88 \times 10^{41}$

① $x^3 + px = q$, $x = u - v$

$u^3 - v^3 = q$ $\quad 3uv = p$

$28 = u^3 - v^3$ $\quad \sqrt[3]{28 - v^3} = u$

$q = uv$

$q = v(\sqrt[3]{28 - v^3})$

$27 = v^3(28 - v^3)$

$27 = (28v^3 - v^3)$

$27 = v^3(28 - 1$

$1 = v^3$

$1 = 1$

$v = 27$

$x = 4$

② $x^3 - 30x - 133$

$u^3 - v^3 = 133$

$v^3 = (133 - v^3)$

$-30^3 = (133 - v^3)(v^3)$

$x = 455$

③ If $x = u - v$

$x^3 = u^3 - v^3$

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