ON PRIME NUMBERS⑭(DefinitionⅧ)

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$$c[n] = \frac{\sqrt{p[n]} + 1}{2} \quad , \quad d[n] = \frac{c[n]^2 + 7 * c[n] - 6}{2}$$

$$\therefore\ d[n] = \frac{p[n] + 16 \cdot \sqrt{p[n]} - 9}{8}$$

$$(\because p[n] = nth\ prime\ number)$$

Here, from "ON PRIME NUMBERS⑬"

$$lim(n \to \infty)\frac{\ln(n)}{ln(d[n])} = 1 \qquad ①$$

$$p[n] \sim n - lix = n - (\frac{x}{lnx} + \frac{x}{(lnx)^2})$$

Here, from "DefinitionⅦ"

$$p[\infty] \sim \infty - li\infty = \infty - (\frac{\infty}{ln\infty} + \frac{\infty}{(ln\infty)^2}) = -\infty$$

$$① = \frac{\ln(\infty)}{ln(d[\infty])} = 1 \qquad \therefore d[\infty] = \infty$$

$$\therefore\ d[\infty] = \frac{p[\infty] + 16 \cdot \sqrt{p[\infty]} - 9}{8} = \infty$$

$$-\infty + 16\sqrt{\infty} * i - 9 = 8\infty$$

$$-\infty + 16\infty * i - 9 = 8\infty$$

$$\therefore\ \infty = \frac{7}{9} = \frac{12}{4} = 3 = -2$$

That's all.（Proof End)