



**Formule 3**

$$196418 \varphi^{-1} - 121393 = \frac{1}{\sqrt{1 + 439204 \sqrt{1 + 439204 \sqrt{1 + 439204 \sqrt{1 + 439204 \sqrt{1 + \dots}}}}}}$$

**Formule 4**

$$9227465 \varphi^{-1} - 5702887 = \frac{1}{\sqrt{1 + 20633239 \sqrt{1 + 20633239 \sqrt{1 + 20633239 \sqrt{1 + 20633239 \sqrt{1 + \dots}}}}}}$$

**Formule 5**

$$165580141 \varphi^{-1} - 102334155 = \frac{1}{\sqrt{1 + 370248451 \sqrt{1 + 370248451 \sqrt{1 + 370248451 \sqrt{1 + 370248451 \sqrt{1 + \dots}}}}}}$$

### Formule 6

$$\varphi^{-1} = \frac{e^{-\pi}\sqrt{5e^{2\pi} - 4} - 1}{2} + \frac{e^{-\pi}}{\sqrt{1 + \sqrt{5e^{2\pi} - 4} + (5e^{2\pi} - 4)\sqrt{5e^{2\pi} - 4} + (5e^{2\pi} - 4)^2\sqrt{5e^{2\pi} - 4} + \dots}}$$

### Formule 7

$$\frac{94}{\varphi} = \sqrt{11045 - 4e^{2\pi}} - 47 + \frac{2e^{\frac{(2^{n+2}-1)\pi}{2^{n+1}}}}{\sqrt{(\sqrt{11045 - 4e^{2\pi}} + e^{\pi})(\sqrt{11045 - 4e^{2\pi}} + e^{\frac{3\pi}{2}})(\sqrt{11045 - 4e^{2\pi}} + e^{\frac{7\pi}{4}})(\sqrt{11045 - 4e^{2\pi}} + e^{\frac{15\pi}{8}})(\sqrt{11045 - 4e^{2\pi}} + e^{\frac{31\pi}{16}}) \dots (\sqrt{11045 - 4e^{2\pi}} + e^{\frac{(2^{n+1}-1)\pi}{2^n}})}}$$

### Formule 8

$$\varphi^{-1} = \frac{2e^{\frac{(2^{n+1}-1)\pi}{2^n\sqrt{5}}} + \left(\sqrt{12005 - 4e\sqrt{5}} - 49\right)}{\sqrt{\left(\sqrt{12005 - 4e\sqrt{5}} + e\sqrt{5}\right)\left(\sqrt{12005 - 4e\sqrt{5}} + e^2\sqrt{5}\right)\left(\sqrt{12005 - 4e\sqrt{5}} + e^4\sqrt{5}\right)\left(\sqrt{12005 - 4e\sqrt{5}} + e^8\sqrt{5}\right) \dots \left(\sqrt{12005 - 4e\sqrt{5}} + e^{\frac{(2^n-1)\pi}{2^{n-1}\sqrt{5}}}\right)}}$$