

$$f(x) = ?$$

x : num steps

$f(x)$: num nodes visited

where $x \bmod \underbrace{262}_{\substack{\text{input} \\ \text{width}}} = 100$

$$g(y) = f(262y + 100) \times 2$$

$$c = 8993$$

$$a + b + c = 116197$$

$$4a + 2b + c = 344481$$

$$16a + 4b + c = 693845$$

$$f(100) = 8993$$

$$f(362) = 116197$$

$$f(624) = 344481$$

$$f(886) = 693845$$

$$f(1148) = 1164289$$

$$\begin{aligned} &+ \dots + 121080 \\ &+ \dots + 121080 \\ &+ \dots + 121080 \\ &+ \dots \end{aligned}$$

$$g(0) = 8993$$

$$g(1) = 116197$$

$$g(2) = 344481$$

$$g(3) = 693845$$

$$g(4) = 1164289$$

$$[g(y) = \cancel{121080}y^2 + ay + 8993] ?$$

$$g(y) = 60540y^2 + 46664y + 8993$$

$$f(x) = 60540\left(\frac{x-100}{262}\right)^2 + 46664\left(\frac{x-100}{262}\right) + 8993$$