

Diketahui

$$3^{2n} + 22n + 2 \text{ habis dibagi } 5$$

Jika $n = 0$

$$3^{2(0)} + 22(0) + 2 = 0$$

$$3^0 + 0 + 2$$

$$1 + 0 + 2 = \frac{3}{5} \times$$

n tidak mungkin 0

Jika $n = 1$

$$3^{2(1)} + 22(1) + 2 = 0$$

$$3^2 + 22 + 2$$

$$9 + 22 + 2$$

$$= \frac{33}{5} \times$$

n tidak mungkin 1

Jika $n = -1$

$$3^{2(-1)} + 22(-1) + 2$$

$$3^{-2} + \frac{20}{1} + 2$$

$$\frac{1}{3^2} - 20$$

$$= \frac{1}{9} - 20$$

$$= \frac{1 - 180}{9} = \frac{179}{9} = \frac{19,889}{5}$$

$$= 3,97$$

$$5^{2n(2n^0)} + (3n - 1) \text{ habis dibagi } 9$$

$$\text{Jika } n = 0 \quad 5^{2 \cdot 0(2 \cdot 0^0)} + (3(0) - 1)$$

$$1 + (-1) = 0 \quad \text{0/9} \times$$

Jika $n = 1$

$$5^{2(1)(2 \cdot 1)} + (3(1) - 1)$$

$$5^4 + 3 - 1$$

$$\underbrace{5 \times 5}_{25} \times \underbrace{5 \times 5}_{25} \times \underbrace{5 \times 5}_{25} + 2 = 0$$

$$\frac{777}{9} \times$$

tidak habis dibagi 9

Jika $n = (-1)$

$$5^{2(-1)(2)} + (3(-1) - 1)$$

$$5^{-4} + (-4)$$

$$= \frac{1}{5^4} - 4$$

= tidak bisa di bagi 9