$a_0 := 5;$

$b_0 := 13;$

$c_0 := 59;$

$d_0 := 34;$

for n **from** 0 **to 4 do**

$p_{(n+1)} := a_n + b_n + c_n - d_n;$

$q_{(n+1)} := a_n - b_n - c_n - d_n;$

$a_{(n+1)} := a_n \cdot \left(p_{(n+1)}^3 \cdot \left(c_n - a_n\right) + q_{(n+1)}^3 \cdot \left(b_n - d_n\right)\right) - 2 \cdot p_{(n+1)} \cdot \left(p_{(n+1)} \cdot \left(c_n^3 - a_n^3\right) + q_{(n+1)} \cdot \left(b_n^3 - d_n^3\right)\right);$

$b_{(n+1)} := b_n \cdot \left(p_{(n+1)}^3 \cdot \left(c_n - a_n\right) + q_{(n+1)}^3 \cdot \left(b_n - d_n\right)\right) + 2 \cdot q_{(n+1)} \cdot \left(p_{(n+1)} \cdot \left(c_n^3 - a_n^3\right) + q_{(n+1)} \cdot \left(b_n^3 - d_n^3\right)\right);$

$m_{(n+1)} := gcd\left(a_{(n+1)}, b_{(n+1)}\right);$

$c_{(n+1)} := c_n \cdot \left(p_{(n+1)}^3 \cdot \left(c_n - a_n\right) + q_{(n+1)}^3 \cdot \left(b_n - d_n\right)\right) - 2 \cdot p_{(n+1)} \cdot \left(p_{(n+1)} \cdot \left(c_n^3 - a_n^3\right) + q_{(n+1)} \cdot \left(b_n^3 - d_n^3\right)\right);$

$d_{(n+1)} := d_n \cdot \left(p_{(n+1)}^3 \cdot \left(c_n - a_n\right) + q_{(n+1)}^3 \cdot \left(b_n - d_n\right)\right) + 2 \cdot q_{(n+1)} \cdot \left(p_{(n+1)} \cdot \left(c_n^3 - a_n^3\right) + q_{(n+1)} \cdot \left(b_n^3 - d_n^3\right)\right);$

$N_{(n+1)} := gcd\left(c_{(n+1)}, d_{(n+1)}\right);$

$a_{(n+1)} := \mathrm{abs}\left(\frac{a_{(n+1)}}{m_{(n+1)}}\right);$

$b_{(n+1)} := \mathrm{abs}\left(\frac{b_{(n+1)}}{m_{(n+1)}}\right);$

$c_{(n+1)} := \mathrm{abs}\left(\frac{c_{(n+1)}}{N_{(n+1)}}\right);$

$d_{(n+1)} := \mathrm{abs}\left(\frac{d_{(n+1)}}{N_{(n+1)}}\right);$

$\left(a_{(n+1)}, b_{(n+1)}, c_{(n+1)}, d_{(n+1)}\right);$

end do