

initial date: (t_0, v_0, y_0) $(4, 15, 120)$

date m, n, p, q, r days later $0, 2, 5, 11, 18$

$$(t, v, y) = (10, 13, 133)$$

$$t \equiv t_0 - m - 2n - 4p + 7q + r \pmod{13} \quad 75 = 13(5) + 10$$

$$t = 4 - 0 - 2(2) - 4(5) + 7(11) + 18 \pmod{13} = 75 \pmod{13} \equiv 10$$

$$v = v_0 + r \pmod{20}$$

$$v = 15 + 18 \pmod{20} = 13$$

$$y = y_0 + 190m - 100n - 5p + 20q + r \pmod{365}$$

$$y = 120 + 190(0) - 100(2) - 5(5) + 20(11) + 18 \pmod{365}$$

initial date: (t_0, v_0, y_0)

$(8, 10, 193)$

date m, n, p, q, r days later

$0, 2, 3, 5, 10$

$$(t, v, y) = (11, 20, 88)$$

$$t \equiv t_0 - m - 2n - 4p + 7q + r \pmod{13} \quad 75 = 13(5) + 10$$

$$t = 8 - 0 - 2(2) - 4(3) + 7(5) + 10 \pmod{13} = 37 \pmod{13}$$

$$v = v_0 + r \pmod{20}$$

$$v = 10 + 10 \pmod{20} = 20 \pmod{20}$$

$$y = y_0 + 190m - 100n - 5p + 20q + r \pmod{365}$$

$$y = 193 + 0 - 100(2) - 5(3) + 20(5) + 10 \pmod{365} = 88 \pmod{365}$$