

$$2020 = \phi^{15} + \phi^{13} + \phi^{10} + \phi^5 + \frac{1}{\phi} + \frac{1}{\phi^3} + \frac{1}{\phi^6} + \frac{1}{\phi^{11}} + \frac{1}{\phi^{16}} = 11111100100_{\text{two}}$$