



A whiteboard with handwritten mathematical equations in black marker. The equations are arranged vertically. The first equation is partially cut off at the top. The second equation is  $2^3 - 1 = 7$  prim. The third equation is  $2^5 - 1 = 31$  prim. The fourth equation is  $2^7 - 1 = 127$  prim. The fifth equation is  $2^{11} - 1 = 2047 = 23 \cdot 89$ .

$$2^2 - 1 = 3 \text{ prim}$$
$$2^3 - 1 = 7 \text{ prim}$$
$$2^5 - 1 = 31 \text{ prim}$$
$$2^7 - 1 = 127 \text{ prim}$$
$$2^{11} - 1 = 2047 = 23 \cdot 89$$

# The CrypTool Script

## Cryptography, Mathematics, and More

Prof. Bernhard Esslinger  
and the CrypTool Development Team

10th Edition

Background reading  
for CrypTool the free e-learning program  
(with number theory code samples for Sage)