Question 1

Find $99 \mod 8$

Question 2

Find $21 \operatorname{div} 20$

Question 3

Find $5^{785} \mod 13$.

Question 4

Which of the following is NOT a prime number

(a) 27 (b) 29 (c) 31 (d) 37

(9) Encrypt the message WALDEN using a shift cipher with $f(p) = (p+15) \mod 26$

(10) The message ZRIALZRIFBD was encrypted using a affine cipher with $f(p) = (5p+17) \mod 26$. What is the decrypted message?

Question 5

What is the greatest common divisor of 84 and 154

Question 6

What is the least common multiple of 15 and 25?

Question 7

A bit string is given as R often binary data bits and a final parity bit. In which of these bit strings are you sure there is an error?

(a) 101110011011001 (b) 110010011101101 (c) 010011101101110 (d) 111001011011010