

1 Question 2.3

$$GCD(2^{300} \times 3^{200}, 2200)$$

2 Solution

We can use simple factorization to find the greatest common divisor of $2^{300} \times 3^{200}$ and 2200.

$$2200 = 2^3 \times 5^2 \times 11$$

Since $2^{300} \times 3^{200}$ does not have any factors of 5 or 11, the greatest common divisor is 2^3 .