

QUESTION

Express the following as products of primes:-

(i) 132 (ii) 400 (iii) 1995

and hence write down $\gcd(132,400)$, $\gcd(132,1995)$ and $\gcd(400,1995)$.

ANSWER

(i) $132 = 2^2 \cdot 3 \cdot 11$ (ii) $400 = 2^4 \cdot 5^2$ (iii) $1995 = 3 \cdot 5 \cdot 7 \cdot 19$
 $\gcd(132, 400) = 2^2 = 4$, $\gcd(132, 1995) = 3$, $\gcd(400, 1995) = 5$