

mobius

Prime Factorization - Is Number a Factor of Both - From Values as Factors



$ \begin{array}{c} 1 \\ 90 = 2 \cdot 3^2 \cdot 5 \\ 1386 = 2 \cdot 3^2 \cdot 7 \cdot 11 \\ 4095 = 3^2 \cdot 5 \cdot 7 \cdot 13 \end{array} $			$ \begin{array}{c} \textbf{2} \\ 140 = 2^2 \cdot 5 \cdot 7 \\ 420 = 2^2 \cdot 3 \cdot 5 \cdot 7 \\ 1540 = 2^2 \cdot 5 \cdot 7 \cdot 11 \end{array} \\ \text{Is 140 a factor of both} \\ 420 \text{ and } 1540? \\ \end{array} $			
is 90 a factor of 1386 and 4095?	A Yes	B No	is 140 a factor of 420 and 1540?	A Yes	B No	
$ \begin{array}{l} 3 \\ 490 = 2 \cdot 5 \cdot 7^{2} \\ 1470 = 2 \cdot 3 \cdot 5 \cdot 7^{2} \\ 5390 = 2 \cdot 5 \cdot 7^{2} \cdot 11 \end{array} $	ls 490 a fact 1470 and		$ \begin{array}{c} 4 \\ 294 = 2 \cdot 3 \cdot 7^{2} \\ 5390 = 2 \cdot 5 \cdot 7^{2} \cdot 11 \\ 9555 = 3 \cdot 5 \cdot 7^{2} \cdot 13 \end{array} $	Is 294 a fact 5390 and		
is 490 a factor of 1470 and 5390?	A Yes	B No	is 294 a factor of 5390 and 9555?	A Yes	B No	
	ls 490 a fact		$6225 = 5^2 \cdot 7^2$	Is 1225 a factor of both 2450 and 3675?		
$2310 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 11 2730 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 13$		2730?	$\begin{array}{c} 2450 = 2 \cdot 5^2 \cdot 7^2 \\ 3675 = 3 \cdot 5^2 \cdot 7^2 \end{array}$	2450 and	3675?	
		2730? В No		Α	3675? B No	
$2730 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 13$ is 490 a factor of	А	B No	$3675 = 3 \cdot 5^2 \cdot 7^2$ is 1225 a factor of	А	B No	