LCM and HCF

Least Common Multiple (LCM) and Highest Common Factors (HCF)

First Number	Second Number	LCM	HCF
$6 = 2 \times 3$	$24 = 2 \times 2 \times 2 \times 3 = 2^3 \times 3$	$2^3 \times 3$	2×3
12	48		
15	45		
120	150		
90	240		
150	100		
90	600		
15	30		
75	90		

Rules to finding LCM and HCF
- Use factor tree method to find the prime factors
- For the LCM choose all the prime factors that are common to both numbers
- Choose the **highest powers** of the prime factors for the LCM
- Choose the **lowest powers** of the prime factors for the HCF
- Choose prime factors that are not shared for the LCM
- Do **not** choose the prime factors that are not shared for the HCF