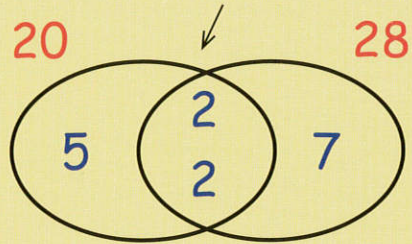# LCM & HCF using Product of Primes

Corbettmaths

$20 = 2 \times 2 \times 5$

$28 = 2 \times 2 \times 7$

Write as a product of prime factors

Place the prime factors in the Venn diagram.
Any prime factors that are "shared" go in the middle

20

28

The Lowest Common Multiple (LCM) is found by multiplying all the numbers in the Venn diagram

$5 \times 2 \times 2 \times 7 = 140$

The Highest Common Factor (HCF) is found by multiplying the numbers in the middle of the Venn diagram

$2 \times 2 = 4$