

Problem Solving Venn Diagrams

Question 3:

The Beauty Parlour at the mall has 25 beauty technicians. 19 can do Hair, 10 can do Mani-/Pedicures, some can do both. Calculate how many technicians can do both Hair and Mani-Pedicures.

Solution: Fill in the spaces with the information given.

No. of beauty technicians, $U =$ _____

No. of technicians for Hair, $n(H) =$ _____

No. of technicians for Mani-/Pedicures, $n(MP) =$ _____

No. of technicians for both, $n(H \cap MP) = n$

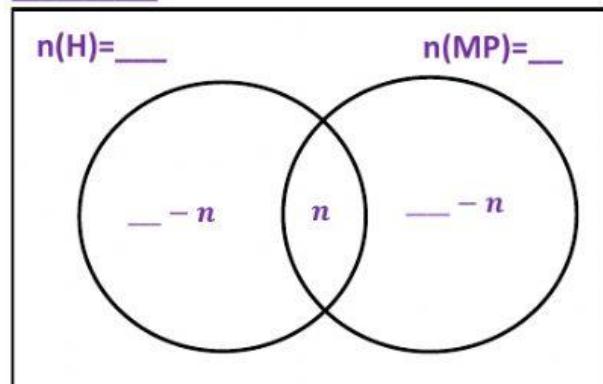
$$_ - x + x + _ - x = 25$$

$$_ + _ + _ - x = 25$$

$$_ - x = 25$$

$$n = _ - _ = \text{employees}$$

$U =$ _____



a) $n(H \cap MP) =$ _____ employees