If P(A) = 0.65 and P(B) = 0.35 and $P(A \cap B) = 0.1$ what is the P(B|A)

A good way to UNDERSTAND notation like this is as follows...

Firstly give them realistic names...Out of 100 people:65 people do ArtP(A) = 0.6535 people do BiologyP(B) = 0.3510 people do both $P(A \cap B) = 0.10$

So also 10 do neither.





65 people do Art and 10 of them also do Biology

The fraction is
$$\frac{10}{65} = \frac{2}{13}$$

It is better not to just try to remember formulas. You just stop thinking if you do!