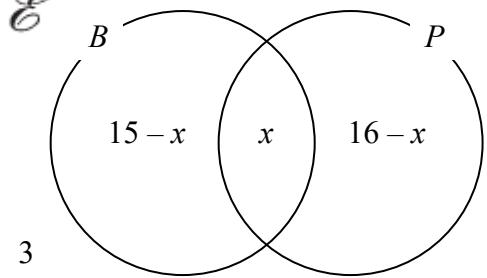


Question	Working	Answer	Mark	Notes
19 (a)			2	B2 $15-x$, $16-x$ and 3 in correct regions on Venn diagram B1 2 of $15-x$, $16-x$ and 3 in correct regions or all 3 values correct, one in correct region. Allow 11 for $15-x$ and 12 for $16-x$ SC B1 x is replaced with a number $x \neq 4$ and they use this incorrect value, to find $15-x$ and $16-x$
(b)	$3 + "15-x" + x + "16 - x" = 30$ oe		2	M1 Correct equation formed, in x , ft their values for $B' \cap P$ and $B \cap P'$ May see only one of these values used eg $3 + 15 + "16 - x" = 30$
	<i>Correct answer scores full marks (unless from obvious incorrect working)</i>	4		A1 cao
(c)		$\frac{11}{30}$	1	B1 ft follow through their answer to part (b), if $0 < \text{part(b)} < 15$ only ie $\frac{15 - \text{"their(b)"))}}{30}$ with numerator a single number. Allow awrt 0.367
				Total 5 marks