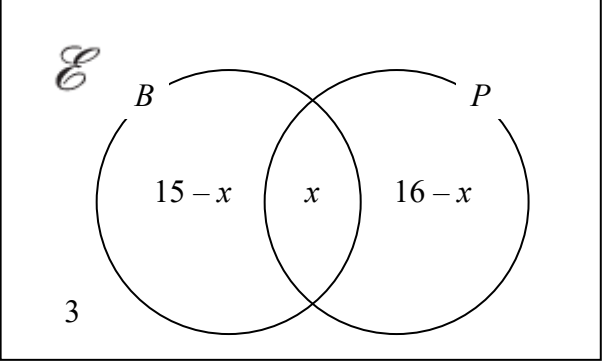


Question		Working	Answer	Mark	Notes
19	(a)			2	<p>B2 $15 - x$, $16 - x$ and 3 in correct regions on Venn diagram</p> <p>B1 2 of $15 - x$, $16 - x$ and 3 in correct regions or all 3 values correct, one in correct region.</p> <p>Allow 11 for $15 - x$ and 12 for $16 - x$</p> <p>SC B1 x is replaced with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