

Question	Scheme	Marks	AOs										
4(a)	$P(\text{not square number}) \times P(\text{even number}) = \frac{3}{4} \times \frac{1}{2} \text{ (o.e)}$	M1	1.1b										
	$= \frac{3}{8} *$	A1*	2.1										
		(2)											
(b)	<table><tr><td>s</td><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>P(S = s)</td><td>$\frac{1}{4}$</td><td>$\frac{3}{8}$</td><td>$\frac{3}{16}$</td><td>$\frac{3}{16}$</td></tr></table>	s	1	2	3	4	P(S = s)	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{16}$	$\frac{3}{16}$	B1 B1	2.1 1.1b
	s	1	2	3	4								
	P(S = s)	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{16}$	$\frac{3}{16}$								
	(2)												
(c)	$\frac{3}{8} + \frac{3}{16} = \frac{9}{16}$	B1ft	1.1b										
		(1)											

(Total 5 marks)

Notes:

(a)	M1	Correct method for finding $P(S = 2)$
	A1*	$\frac{3}{8}$
(b)	B1	At least one correct probability for $S = 3$ or $S = 4$
	B1	Fully correct table. Accept different letters for S.
(c)	B1ft	For $\frac{3}{8}$ + their probability for $S = 3$ evaluated correctly, ft their $P(S = 3) < \frac{5}{8}$