

<b>1</b>	eg $\frac{x+7}{80} = \frac{1}{4}$ <b>or</b> $4(x+7) = 80$ <b>or</b> $x+7 = 20$		<b>4</b>	M1	for setting up a correct equation in terms of $x$ only
	eg $x = 80 \times \frac{1}{4} - 7 (=13)$ <b>or</b> $4x + 28 = 80$ <b>and</b> $x = \frac{80-28}{4} (=13)$ <b>or</b> $x = 13$			M1	for a complete method to find the value of $x$ <b>or</b> $x = 13$ . Award of this mark implies M2.
	eg $80 - ("13" + 7 + "13" - 11 + 3 \times "13") (=19)$ <b>or</b> $\frac{"13" + 7 + "13" - 11 + 3 \times "13"}{80} \left( = \frac{61}{80} \right)$			M1	for a method to find the number of yellow counters <b>or</b> $P(R \text{ or } B \text{ or } G)$
	<i>Correct answer scores full marks (unless from obvious incorrect working)</i>	$\frac{19}{80}$		A1	oe eg accept 0.2375 or 23.75% or 0.237 or 23.7% or 0.238 or 23.8% or 0.24 or 24%
<b>Total 4 marks</b>					

2	(a)	eg $x + 0.15 + 0.5 + y + 0.13 + 0.03 = 1$ oe <b>or</b> $x + y = 1 - 0.15 - 0.5 - 0.13 - 0.03$ oe <b>or</b> $x + y + 0.81 = 1$ oe <b>or</b> $x + y = 1 - 0.81$ oe <b>or</b> $1 - 0.15 - 0.5 - 0.13 - 0.03 = 0.19$ oe <b>or</b> $1 - 0.81 = 0.19$ oe			2	M1 for setting up an equation in $x$ and $y$ using the sum of probabilities equals 1 <b>or</b> for showing that probabilities add up to 1
		<i>Working required</i>		Shown		A1 correctly rearranges to $x + y = 0.19$ (must be shown from a correct method) <b>or</b> a clear statement that $x + y = 0.19$
	(b)	$x + y = 0.19$ $3x - y = 0.09$ Adding $(x + 3x = 0.19 + 0.09$ or $4x = 0.28)$ <b>or</b> $3x - (0.19 - x) = 0.09$ or $x + 3x - 0.09 = 0.19$	$3x + 3y = 0.57$ $3x - y = 0.09$ Subtracting $(3y - -y = 0.57 - 0.09$ or $4y = 0.48)$ <b>or</b> $3(0.19 - y) - y = 0.09$ or $\left(\frac{0.09 + y}{3}\right) + y = 0.19$		3	M1 for a correct method to eliminate $x$ or $y$ : coefficients of $x$ or $y$ the same <b>and</b> correct operator to eliminate selected variable (condone any one arithmetic error in multiplication) <b>or</b> writing $x$ or $y$ in terms of the other variable and correctly substituting (condone missing brackets)

		$"0.07" + y = 0.19$ or $3 \times "0.07" - y = 0.09$ <b>or</b> $y = 0.19 - "0.07"$ or $y = 3 \times "0.07" - 0.09$	$3x + 3 \times "0.12" = 0.57$ or $3x - "0.12" = 0.09$ <b>or</b> $x = 0.19 - "0.12"$ or $x = \left( \frac{0.09 + "0.12"}{3} \right)$			M1	dep on first M1 for a correct method to find other variable by substitution of found variable into one equation <b>or</b> for repeating the above method to find the second variable.
		<i>Working required</i>	$x = 0.07$ and $y = 0.12$			A1	oe dep on M1
<b>Total 5 marks</b>							

<b>3</b>	(b)	$18 + x + 2x = 90$ oe or $90 - 18 (=72)$		<b>3</b>	M1	
		$x = \frac{90-18}{3} = 24$ or $"72" \div 3 (=24)$			M1	
		<i>Correct answer scores full marks (unless from obvious incorrect working)</i>	$\frac{24}{90}$		A1	oe or 0.26(666...) or 26(.666...) % truncated or rounded