Mark scheme

Introduction to probability

Mathematics 0580 · Questions from Paper 1, Paper 2, Paper 3 and Pape…

Total marks

26

MARKS FOR EACH QUESTION

1	2	3	4	5	6	7	8	9	10	Total
1	2	3	2	2	4	3	2	3	4	**26**

Question 1 **[1]**

1	0.85 oe	**1**	

Question 2 **[2]**

2	**(a)**	$\frac{2}{6}$ oe	**1**	
	(b)	200 Final answer	**1FT**	FT 600 × *their* **(a)** providing *their* **(a)** is a probability

Question 3 **[3]**

3(a)	Blue	**1**	
3(b)	$\frac{2}{5}$ oe	**1**	
3(c)	$\frac{3}{5}$ oe	**1**	

STEM | Exam Builder

Question 4 **[2]**

4	224	**2**	**M1** for $\frac{7}{30}[\times 960]$ oe

Question 5 **[2]**

5	70	**2**	**M1** for $25\,000 \times 0.0028$ oe

Question 6 **[4]**

6(a)	0.11 oe	**2**	**M1** for $1 - (0.3 + 0.16 + 0.18 + 0.25)$ oe or **B1** for 0.89 oe
6(b)	0.46 oe	**2**	**M1** for $0.3 + 0.16$

Question 7 **[3]**

7	0.2[0] 0.08 oe	**3**	**M2** for $\frac{1-(0.53+0.19)}{7}$ oe or **M1** for $1 - (0.53 + 0.19)$ oe

Question 8 **[2]**

8	0.55 oe	**2**	**B1** for P(red) = 0.1 or P(pink) = 0.35 or **M1** for $0.9 + 0.65 - 1$ or $1 - (0.1 + 0.35)$

Question 9 **[3]**

9(a)	0.24 oe	**2**	**M1** for $1 - 0.28$ oe
9(b)	42	**1**	

STEM | Exam Builder

Question 10 **[4]**

10(a)	50	**2**	**M1** for $\frac{5}{7+5+2}$ [$\times 140$] or $\frac{140}{7+5+2}$ [$\times 5$]
10(b)	26	**2**	**M1** for $\frac{5+9}{n} = \frac{2}{7}$ oe or $\frac{5+9}{p+7+5+2+9} = \frac{2}{7}$ oe

STEM | Exam Builder