



REVIEW PACK GRADE 8 MATHS

Marking Scheme

PROBABILITY

DICE - 4		DICE - 5		DICE - 6	
a	$\frac{1}{36}$	a	$\frac{5}{18}$	a	$\frac{1}{4}$
b	$\frac{1}{36}$	b	$\frac{11}{36}$	b	$\frac{3}{4}$
c	$\frac{1}{18}$	c	$\frac{25}{36}$	c	$\frac{1}{2}$
d	$\frac{1}{12}$				
e	$\frac{1}{12}$				

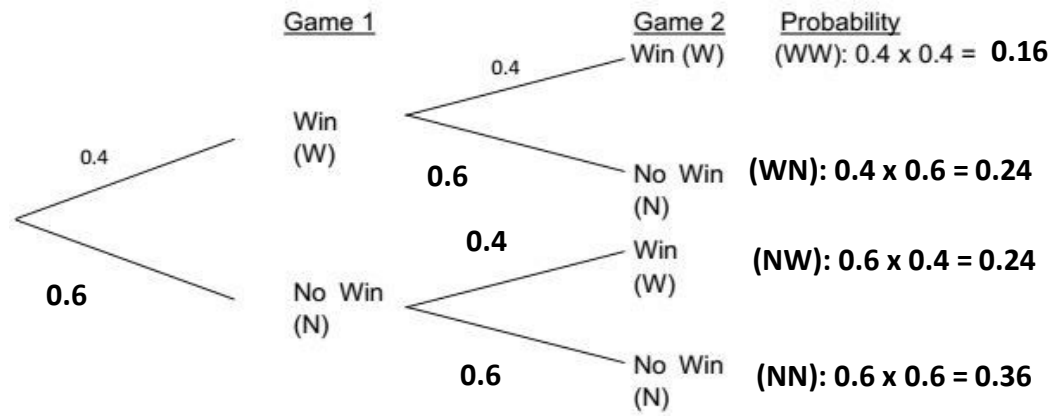
LETTERS - 1		LETTERS - 2	
a	$\frac{1}{9}$	a	$\frac{1}{7}$
b	$\frac{5}{9}$	b	$\frac{1}{7}$
c	$\frac{1}{9}$	c	$\frac{1}{21}$
		d	$\frac{10}{21}$
		e	$\frac{11}{21}$

COLOURS - 1		COLOURS - 2	
a	$\frac{4}{7}$	a	$\frac{4}{7}$
b	$\frac{4}{7}$	b	$\frac{3}{7}$
c	$\frac{16}{49}$	c	$\frac{2}{7}$
d	$\frac{9}{49}$	d	$\frac{1}{7}$
e	$\frac{40}{49}$	e	$\frac{6}{7}$

BIRTHDAYS	
a	$\frac{1}{7}$
b	$\frac{2}{7}$
c	$\frac{1}{49}$
d	$\frac{4}{49}$
e	$\frac{1}{7}$

TREE DIAGRAM

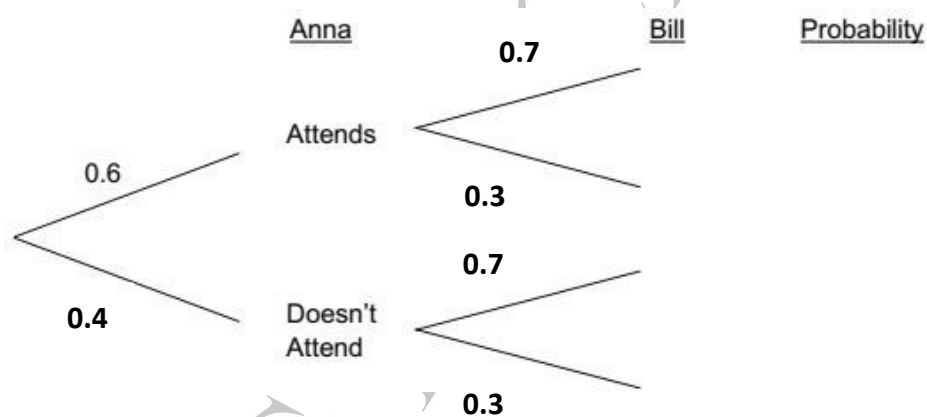
1.



a) 0.16

b) 0.48

2.



a) 0.12

b) 0.46

DIFFERENT TYPES OF AVERAGE

1							
a	5	5	x		f	9	6 3
b	3	3	x		g	3	3 6
c	3	3	6		h	1	5 9
d	5	5	1	or	5	5	9
e	6	7	9		i	5	7 9
					j	3	3 9

2							
a	1	3	5	7	d	1	5 5 9
b	5	5	3	3 (you can have more than 1 mode)	e	1	5 5 9
c	1	3	3	5	f	5	5 7 9

3	
a	7
b	5
c	7

4	
a	1 4 4 5 6 9
b	2 4 4 5 6 9
c	6 6 6 6 6 6
d	5 6 6 6 6 7
e	1 1 1 1 2 6

CHARTS AND DIAGRAMS

- 1.
- a. 50miles
 - b. 30minutes
 - c. Answer may vary
 - d. Answer may vary
 - e. i) 1.11 mi/min or 66.67mph
ii) 0.43mi/min or 25.7mph
2. Parkstone 30
Branksome 45
Poole 51
Southampton 99
Bournemouth 75
3. Prawn Cocktail 15
Salt Vinegar 30
Cheese and Onion 45
Plain 60
4. a) 27 in year 7 and 28 in year 8
b)

STEM AND LEAF DIAGRAM

- I.
- a)
 - i) Highest Value: 57
 - ii) Smallest Value: 23
 - iii) Range: 34
 - iv) Mode: 45
 - v) Median 34
 - vi) Add up to: 396
 - vii) Mean: 36
 - b.
 - i) Highest Value: 123
 - ii) Smallest Value: 94
 - iii) Range: 29
 - iv) Mode: 94 and 113
 - v) Median 107
 - vi) Add up to: 1177
 - vii) Mean: 107

SCATTER GRAPHS

- a) Negative Correlation
- b)
- c)

ALGEBRAIC EXPRESSIONS AND EQUATIONS

I. Expanding

- | | |
|----------------|----------------|
| a. $2x + 6$ | a. $2(4x + 7)$ |
| b. $5x + 35$ | b. $3(2x + y)$ |
| c. $6 + 3y$ | c. $3(2x + y)$ |
| d. $12 - 4x$ | d. $9x + 11y$ |
| e. $7y - 42$ | e. $13x - 11$ |
| f. $5x + 10y$ | f. $8(2x + 5)$ |
| g. $48 - 24y$ | |
| h. $18x + 27y$ | |

II. Factorising

- i) $15x + 10$
ii) $15x + 6$
iii) $15x + 15$
iv) $15x + 75$
v) $15x^2 + x$
- a) $2(x + 5)$
b) $2(3x - 2)$
c) $3(2x + 3)$
d) $5(x - 2)$
e) $3(x + 4)$
f) $4(x - 4)$
g) $6(x + 3)$
h) $8(x + 3)$