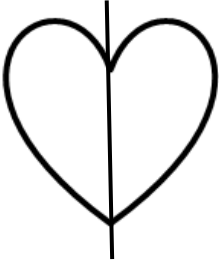






ANSWERS – F-NC-SET-2

Typical Grade Boundaries



C	D	E	F	G
76	60	47	33	20


1.	a)	Line symmetry							
			(1)						
		b) Order of rotational symmetry = 1	(1)						
2.	a)	Two hundred and fifty seven thousand eight hundred	(1)						
	b)	258 000	(1)						
	c)	$100 \times 60 = 6000$	(1)						
	d)	$234 \div 9 = 26$	(2)						
3.		<table border="1" style="margin-left: auto; margin-right: auto; text-align: center;"> <tr> <td style="width: 30%;">4</td> <td style="width: 40%;">$3 + 2 + 2 + 2 =$</td> <td style="width: 30%;">9</td> </tr> <tr> <td>5</td> <td>$3 + 2 + 2 + 2 + 2 =$</td> <td>11</td> </tr> </table>	4	$3 + 2 + 2 + 2 =$	9	5	$3 + 2 + 2 + 2 + 2 =$	11	(2)
4	$3 + 2 + 2 + 2 =$	9							
5	$3 + 2 + 2 + 2 + 2 =$	11							
	b)	$2n + 1$ (1 mark for only $2n$ or $+ 1$)	(2)						
4.	a)	$8.6 - 2.7 = 5.9$	(1)						
	b)	$-5.3 - 1.7 = -7$	(1)						
	c)	$4 + 5 \times 3 = 19$ (bodmas)	(1)						
	d)	$36 \div (3 \times 4) = 3$	(1)						
	e)	$-4, -1, -0.9, 0.809, 0.89$	(1)						

5.

Monday		6
Tuesday		8
Thursday		12
Saturday		17

1 mark for each pair

Monday	
Friday	

Key:  = 4
--

1 mark for icons, 1 mark for key

6. a) $14.1 \times 99 = 14 \times 100 = 1400$ (1)

b) $\frac{14.9 \times 40.1}{9.8 \times 4.9} = \frac{15 \times 40}{10 \times 5} = \frac{600}{50} = 12$ (2)

7. a) 3000m (1)

b) 2000mm (1)

c) 0.75 kilograms. (1)

d) 1.27 grams (1)

8. a)

Fraction	%	Decimal
$\frac{3}{4}$75%.....0.75.....
.....9/10.....	90%0.9.....
.....2/10 or 1/5.....20%.....	0.2

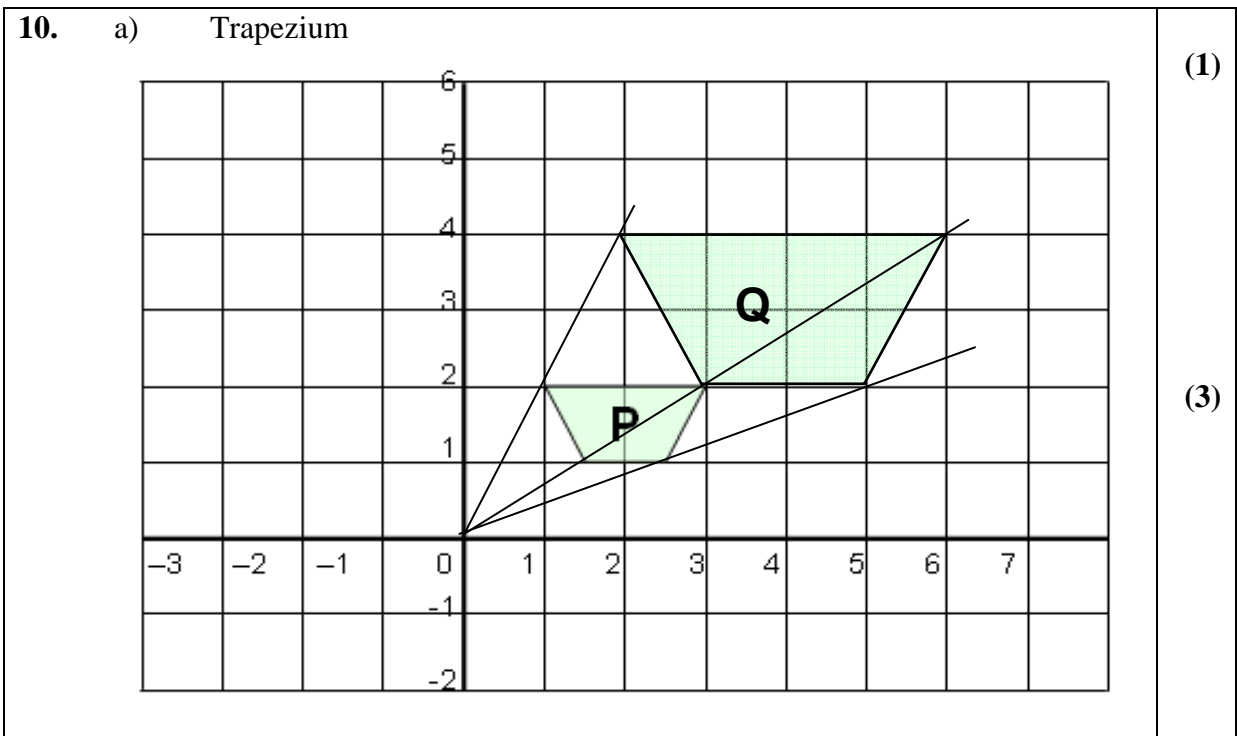
1 mark for each line

b) $16\% = \frac{16}{100} = \frac{4}{25}$
must be simplest to get mark (1)

c) $\frac{6}{25} \rightarrow \frac{24}{100} = 24\%$ (1)

d) $\frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$
 $\frac{3}{8} + \frac{1}{8} = \frac{1}{2}$
1 mark each line (2)

9.	a)	$x + 3$	(1)
	b)	$x + 3 + x = 143 \rightarrow 2x + 3 = 143 \rightarrow 2x = 140 \rightarrow x = 70$ 1 mark for equation, 1 for correct answer	(2)



11.	a)	Tangent	(1)
	b)	Chord	(1)
	c)	Volume = 15 cm^3	(1)

12. $24.3 \times 56 = 1360.8$
Marks for working and correct answer

13.

1	4 4 7 8 8 9
2	0 1 4 4 4 5 7 8
3	1 2 3

Key 1 | 2 = 12

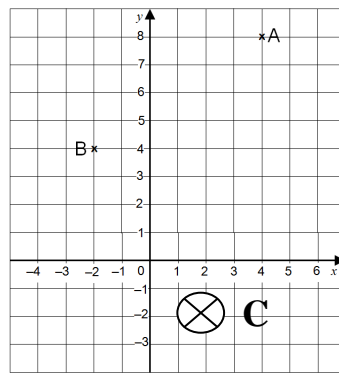
2 marks for ordered stem and leaf and 1 for key

(3)

14. $345 \times 62 = 21390$

a)	$34.5 \times 6.2 =$	213.9	(1)
b)	$0.345 \times 0.62 =$	0.2139	(1)
c)	$213.9 \div 62 =$	3.45	(1)

15.



- a) point A (4 , 8) (1)
- b) point B (- 2 , 4) (1)
- c) Mark the point (2, - 2) with a cross (x) and label it C. (1)

- 16. a) 9 (1)
- b) 8 (1)

- 17. a) *external angle* (1)
- b) All external angles add up to 360.
We have 5 external angles
 $360 \div 5 = 72$ (2)
- c) 105° (allow from 100 – 110) (1)
- d) $95 + 105 + 90 = 290$ (all known angles)
 $360 - 290 = 70^\circ$ (360 in quadrilateral) (1)
Must show working to get any mark

- 18. a) $1/6$ (1)
- b) $2/6$ or $1/3$ probability for 1 or 6
 $1/3 \times 60 = 20$ (2)
1 mark for working, 1 mark correct answer.

- 19. $15\% = 10\% + 5\%$
 $\pounds 280 \quad \pounds 28 \quad \pounds 14 \rightarrow 28+14 = \pounds 42$ off (3)
Sale price = $\pounds 280 - \pounds 42 = \pounds 238$

- 20. $1+2+3 = 6$ shares
 $240 \div 6 = \pounds 40 = 1$ share \rightarrow $\pounds 40$ $\pounds 80$ $\pounds 120$ (2)

21.

	Men	Women	Total
EastEnders	8	10	18
Strictly Come Dancing	7	8	15
Doctor Who	6	3	9
Merlin	5	3	8
Total	26	24	50

- b) 26 men, 5 liked Merlin $P = 5/26$ (1)

22.	a) i) $3a + 3$ ii) p^4 iii) $4x + y$	(1) (1) (2)
	b) $3y^2 - 2y$	(2)
23.	a) 3 times b) 19km c) 12 km in $\frac{3}{4}$ hour gives 16 kilometres per hour. (1 mark working, 1 mark correct answer)	(1) (1) (2)
24.	a) $6\frac{1}{10}$ b) $9\frac{1}{10}$	(2) (2)
25.	a) i) $x = 3$ ii) $y = 5$ b) $-2, -1, 0, 1, 2, 3$	(2) (2) (2)
26.	a) Median score for Maths = 7 b) Mean score for English = $42 \div 7 = 6$	(1) (2)
27.	$10 \times 8 \times 12 \div 2 = 480 \text{ cm}^3$	(2)