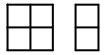
5540F/1Foundation Non Calc					
Question		**Working**	**Answer**	**Mark**	**Notes**
1	(a) (b) (c)		3000 4681 five thousand and sixty	1 1 1	B1 for 3000 cao B1 for 4681 cao B1 for five thousand and sixty
2	(a) (b)		8 cm or 80mm Midpoint	2 1	B1 for 7.8 – 8.2 or 78 – 82 or $3 - 3\frac{3}{16}$ B1 for appropriate unit cm or mm or inches B1 for midpoint marked ± 2mm
3	(a) (b) (c)		16 26 	1 1 1	B1 for 16 cao B1 for 26 cao B1 for one box with 4 divisions and 2 small boxes.
4	(a) (b)		6, 17, 24, 168 0.5, 1.8, 3.71, 12.4	1 1	B1 for 6, 17, 24, 168 B1 for 0.5, 1.8, 3.71, 12.4
5		$\frac{60}{2} \times 5 =$	1.50	3	M2 for $\frac{60}{2} \times 5$ oe or 150 seen M1 for $\frac{60}{2}$ or 30 seen or 60×5 or 300 seen or 0.6×5 or 3(.00) seen A1 for 1.5(0)(p) Accept 150p with £ crossed out
6	(a) (b)(i) (ii)		162 York Leeds	1 2	B1 for 162 cao B1 for York cao B1 for Leeds cao

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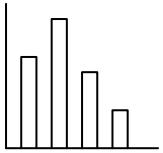
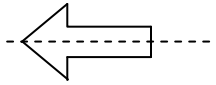
Question		**Working**	**Answer**	**Mark**	**Notes**
7	(a)(i)		(1, 4)	2	B1 for (1, 4) cao
	(ii)		(4, 0)		B1 for (4, 0) cao
	(b)(i)		*P* marked at (3, 2)	2	B1 for *P* marked at (3, 2)
	(ii)		*Q* marked at (–4,3)		B1 for *Q* marked at (–4,3)
8	(a)		Bars drawn at heights 8, 5 and 3	2	B2 for 3 bars drawn correctly (B1 for one bar drawn correctly or for 3 bars with correct heights)
	(b)		Blue	1	B1 ft for "blue" (ft from table or their bar chart)
9	(a)			1	B1 for completed shape cao
	(b)			1	B1 for line of symmetry drawn
10	(i)	9 – 5	4	3	B1 for 4 cao
	(ii)	20 ÷ 10	2		B1 for 2 cao
	(iii)	7 + 2	9		B1 for 9 cao

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Question		**Working**	**Answer**	**Mark**	**Notes**
11	(a)		$\frac{2}{5}$ Reason	2	B1 for $\frac{2}{5}$ B1 for correct reason. E.g. "$\frac{2}{5}$ does not cancel to $\frac{1}{2}$" or "2 is not half of 5" or "$\frac{2}{5}$ is 0.4" or "$\frac{2}{5}$ is less than $\frac{1}{2}$" or "(the top is even and) the bottom is odd" oe
	(b)	$3 \times (20 \div 4)$	15	2	M1 for $3 \times (20 \div 4)$ oe or $\frac{60}{4}$ or 5 seen A1 for 15 cao
12	(a)	3×6	18	1	B1 for 18 cao
	(b)	$2 \times 3 + 2$	8	2	M1 for $2 \times 3 + 2$ A1 for 8 cao
13	(a)		metres (m) grams (g) litres (l)	3	B3 all correct, accept abbreviations (B1 for each one correct)
	(b)	4×100	400	1	B1 for 400 cao
	(c)	$1500 \div 1000$	1.5	1	B1 for 1.5 cao

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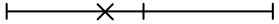
Question		**Working**	**Answer**	**Mark**	**Notes**
14	(a)		*B* 	1	B1 for *B* marked on line $0.25 \leq B < 0.5$
	(b)		(g, t), (y, h), (y, t) (b, h), (b, t)	2	B2 for 5 correct pairs (order within brackets need not be consistent, ignore pairs repeated) and no incorrect pairs (B1 for 2 or more correct pairs, ignore any incorrect pairs)
15	(a)(i)	180 – 45	135	2	B1 for 135 cao
	(ii)		Reason		B1 for (angles on a straight) line add to 180°
	(b)	180 – (80 + 60)	40	2	M1 for 180 – (80 + 60) A1 for 40 cao
16	(a)		0.92	1	B1 for 0.92 cao
	(b)		$\frac{3}{100}$	1	B1 for $\frac{3}{100}$ cao
	(c)	$\frac{5}{100} \times 400$	20	2	M1 for $\frac{5}{100} \times 400$ oe A1 for 20 cao
17	(a)		129 - 133	1	B1 for 129 – 133
	(b)	6×50	290 - 310	2	B2 for 290 – 310 (B1 for 6 ± 0.2 (cm) seen or for d x 50 with $3 \leq d \leq 9$)
	(c)		Point C marked	2	B1 for $BC = 7 \pm 0.2$ cm B1 for bearing = $60 \pm 2°$

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Question		**Working**	**Answer**	**Mark**	**Notes**
18	(a)		(–8), –5, (–2), 1, 4, 7	2	B2 for all 4 values (B1 for any 2 correct)
	(b)	Points + line	Correct line	2	B2 cao for correct line between $x = –3$ and $x = 2$ (B1 ft for plotting 4 points correctly or for a line with gradient 3 or for a line passing through (0,1))

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Question		**Working**	**Answer**	**Mark**	**Notes**
19		540 24 2160 10800 12960	129.6(0)	3	M1 for a complete method with relative place value correct. Condone 1 multiplication error, addition not necessary. **OR** M1 for a complete grid. Condone 1 multiplication error, addition not necessary. **OR** M1 for sight of a complete partitioning method, condone 1 multiplication error. Final addition not necessary. A2 for 129.6(0)(p) cao (A1 (dep on M1) for correct placement of decimal point after final addition or for digits 1296(0) seen) SC: B1 for addition of 24 lots of 5.4(0) or 540

	5	**4**	**0**	
1	10	8	0	**2**
2	20	16	0	**4**
	9	6	0	

	500	**40**	**0**
20	10000	800	0
4	2000	160	0

10000 + 2000 + 800 160 = 12960

	5	**0.4**	
	100	8	**20**
	20	1.6	**4**

100 + 20 + 8 + 1.6 = 129.6

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Question		**Working**	**Answer**	**Mark**	**Notes**
20	(a)	$\frac{4}{12}+\frac{1}{12}$	$\frac{5}{12}$	2	M1 for $\frac{4}{12}$ or for attempting to use a suitable common denominator other than 12, at least one of the two fractions correct. A1 for $\frac{5}{12}$ oe **OR** Attempt to use decimals, must use at least 2 d.p. M1 for 0.33(33...) + 0.08(33...) A1 for 0.416 recurring
	(b)	$\frac{3\times1}{4\times5}$	$\frac{3}{20}$	1	B1 for $\frac{3}{20}$ oe
21	(a)		$5d$	1	B1 for $5d$ or $5 \times d$
	(b)		$2y^2$	1	B1 for $2y^2$ or $2 \times y^2$
	(c)	$4\times3a-4\times7$	$12a-28$	2	M1 for $4\times3a$ or 4×7 or $12a$ or 28 A1 for $12a-28$ cao
	(d)		t^3	1	B1 for t^3 (accept t^{1+2} oe)
	(e)		m^2	1	B1 for m^2 (accept m^{5-3} oe)

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Question		**Working**	**Answer**	**Mark**	**Notes**
22	(a)		2 | 378 3 | 1456 4 | 12455 5 | 023 2 | 3 = 23	3	M1 for using 2, 3, 4 and 5 as stem A1 for ordered stem and leaf diagram A1 for consistent key, e.g. 2 | 3 = 23 (years) **OR** M1 for using 20, 30, 40 and 50 as stem A1 for ordered stem and leaf diagram A1 for consistent key, e.g. 20 | 3 = 23 (years)
	(b)		$\frac{8}{15}$	2	B2 ft for $\frac{'8'}{'15'}$ (ft from stem and leaf diagram) (B1 for $\frac{'8'}{a}$, $a >$ '8', or $\frac{b}{'15'}$, $b <$ '15') SC: B1 for '8' : '15' or '8' out of '15'
23	(a)	300 ÷ 25	12	2	M1 for 25 + 25 + 25 + ... or "3" ÷ 25 or £1 = 4 oe A1 for 12 cao
	(b)		$3x$	1	B1 for $3x$ or $3 \times x$
	(c)		$x + 5$	1	B1 for $x + 5$ cao
24		$\frac{1}{2}(3\times4)\times2$ $+(3\times7)+(4\times7)+(5\times7)=$ 12 + 21 + 28 + 35	96	3	M1 for $\frac{1}{2}(3\times4)$ or 3×7 or 5×7 or 4×7 M1 for attempt to add 5 faces which are areas A1 for 96 cao NB: Zero marks for calculating volume

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25	(a) (b) (c)		1632 16.32 3.4	1 1 1	B1 for 1632 or 1632.0 B1 for 16.32 cao B1 for 3.4 cao
26		$\frac{300\times10}{0.5}=\frac{3000}{0.5}$	5890 - 6040	3	M1 for any two of 300, 10 or 0.5 M1 for $\frac{3000}{0.5}$ or 300×20 or 600×10 or $\frac{3020}{0.5}$ or 302×20 or 604×10 A1 for 5890 - 6040 SC: B2 for answer of 1500 or 1510
27			Correct construction	2	M1 for constructing intersecting arcs of equal radius. A1 for a correct triangle, with appropriate arcs. SC: B1 for a triangle drawn within guidelines if M0 scored. NB: Guidelines allow for 2mm tolerance
28			–2, –1, 0, 1, 2	2	B2 for –2, –1, 0, 1, 2 cao (B1 for 4 correct or for 4 correct and one incorrect or for 5 correct and one incorrect)

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Question		**Working**	**Answer**	**Mark**	**Notes**
29	(a)	Triangle A	Triangle with vertices (-1,5), (-1,3), (3,3)	2	B2 for triangle with vertices (–1, 5), (–1, 3), (3, 3) (B1 for triangle with correct orientation or for triangle rotated ±90° centre (–1, 1))
	(b)	Triangle B	Triangle with vertices (1,-2), (5,-2), (5,-4)	1	B1 for triangle with vertices (1, –2), (5, –2), (5, –4)
	(c)	Triangle C	Triangle with vertices (1,1.5), (1,4), (2,4)	2	B2 for triangle with vertices (1, 1.5), (1, 4), (2, 4) (B1 for the triangle with correct orientation or for any two of the vertices (1, 1.5), (1, 4), (2, 4)) SC: B1 for a triangle with vertices (1, 1.5), (1, k), (2, k)