# 7C Half Term Assessment 1 Solutions

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30       70       40       M1 for 70         4 $21 + 22$ 1         5 $11 - 49$ $20 - 40$ 2 $18 - 42$ $22 - 38$ M1 for 2 correct pairs         6       (a) $42$ 1         (b) $4$ 1         (c) $7$ 1         (d) $13$ 1         (e) $19$ 2       M1 for correct use of order of operation         7       (a) $26$ 1         (b) $17$ 1         (c) $162$ 1         8       (a) $8 cm^2$ 1
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(b) 4       1         (c) 7       1         (d) 13       1         (e) 19       2         7       (a) 26         1       1         (b) 17       1         (c) 162       1         8       (a) 8 cm <sup>2</sup>
(c) 7       1         (d) 13       1         (e) 19       2         7       (a) 26         1       1         (b) 17       1         (c) 162       1         8       (a) 8 cm <sup>2</sup>
(d) 13       1         (e) 19       2       M1 for correct use of order of operations         7       (a) 26       1         (b) 17       1         (c) 162       1         8       (a) 8 cm <sup>2</sup> 1
(e) 19         2         M1 for correct use of order of operation           7         (a) 26         1           (b) 17         1           (c) 162         1           8         (a) 8 cm <sup>2</sup> 1
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(c) 162         1           8         (a) 8 cm <sup>2</sup> 1
8 (a) $8 cm^2$ 1
$(h) 4 am^2$
(c) $16 \ cm^2$ 1
9 (a) 784 2 <b>M1</b> for 216 + 568
(b) 5438 1
(c) 1081 1 (i) 1161 M1 for correct procedure
(d) 1161 1
(e) 36 1
10 (a) 13 & 29 1
(b) 2 & 77 2 <b>M1</b> for each correct no.
113M1 for area of rectangle of 96 $cm^2$
<b>M1</b> for area of triangle of $12 cm^2$

# 7C Half Term Assessment 2 Solutions

		2	
1	(a) 44°	2	M1 for 180-136 oe
-	(b) 95°	2	M1 for 360-(80+64+121) or 360-265 oe
	(c) 44°	3	M1 for identifying 84°
			M1 for 180-(52+84) oe
2	(a) 8.5	2	M1 for $\frac{6+11+3+14+11+8+5+10}{8}$ or $\frac{68}{8}$ oe
-	(b) 6	1	8 8
3	(a) Any fraction in the range $\frac{1}{2} < x < 1$	1	
-	2		
	(b) i) $\frac{2}{3}$	1	
-	(c) ii) <u>5</u>	1	
	$(C) = \frac{1}{6}$	-	
4	(a) angle 19° to 120° inclusive	1	oe
	The angle is bigger than a right angle	1	
	The angle is obtuse		
	(b) i) 68° (within $\pm 2^\circ$ )	1	
	(c) ii) 113° (within $\pm 2^\circ$ )	1	
5	(a) £5	1	
	(b) £9	1	
6	(a) 3 <i>x</i>	1	
	(b) 12 <i>m</i>	1	
	(c) $4a + 2b$	1	
	(d) 11 <i>t</i>	1	
7	(a) i) 0.25	1	
-	ii) 0.44	1	
-	(b) i) 52%	1	
-	ii) 60%	1	
8	(a) 9	2	M1 for ordering the numbers and
			attempting to find a solution
	(b) 4	1	
-	(c) The medians show that Chole is	1	oe
	better is better at the spelling test as		
	her average is higher than Lucie's.		
	The ranges show that Chloe's results	1	oe
	are also less varied so she is more	-	
	likely to maintain a good score.		
9	(a) $\frac{6}{7}$	1	
		-	6+1
	(b) $\frac{7}{8}$ or <b>oe</b>	2	<b>M1</b> for $\frac{6+1}{8}$ or other correct denominator
	(c) $\frac{3}{12}$ or <b>oe</b>	2	M1 for $\frac{7-4}{12}$ or other correct
	12	1	denominator. Condone attempt to add
			for <b>M1</b>
10	(a) 24	1	
	(b) 32	2	M1 for showing substitution of
		1	$C = 5 \times 7 - 3$

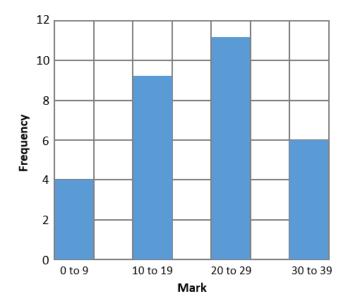
## 7C Half Term Assessment 3 Solutions

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			-	
2       (a) 23       (b) 35       (c) 36	1	(a) 13	2	
(b) 35       (c) 35       (c) 35       (c) 35       (c) 35       (c) 36       (c) 140       (c) 2         (b) 140       (c) 140       (c			1	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	2	(a) 23		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		(b) 35		
(b) 140       2         5       (a) 5,10,15,20,25       1         (b) 1,2,4,5,10,20       2       M1 for 2 correct pairs of factors         (c) 7       1         (d) 4 or 36       1         6 $y$ 3         7       (a) 6.41, 7.643, 7.65       1         7       (a) 6.41, 7.643, 7.65       1         8       100       1         9       (a) 7.15       2         (b) 3.63       2       1         (c) 0       1         (b) $\frac{1}{3}$ 1         (c) 0       1         9       (a) $\frac{1}{6}$ 1         (b) $\frac{1}{3}$ 1         0       1       0e         (c) 0       1       1         10       (a) $\frac{1}{6}$ 1         (b) $\frac{1}{3}$ 1       0e         (c) 0       1       1	3		2	<b>M1</b> for exchange rate of 1.85, or $\frac{\pounds 160}{\pounds 40} = 4$
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	4	(a) $\frac{1}{3}$ oe	1	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		(b) 140	2	
ic) 7       1         id) 4 or 36       1         id) 6.41, 7.643, 7.65       1         id) 100       1         id) 8.049, 8.094, 8.1       1         id) 100       1         id) 100       1         id) 100       1         id) 11       1         <	5	(a) 5,10,15,20,25	1	
id) 4 or 36       1         6       y       3 $4$ $4$ $4$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $2$ $4$ $6$ $3$ $1$ $1$ $3$ $1$ $1$ $3$ $1$ $1$ $3$ $1$ $1$ $3$ $1$ $1$ $3$ $1$ $1$ $4$ $1$ $1$ $3$ $1$ $1$ $4$ $1$ $1$ $3$ $1$ $1$ $4$ $1$ $1$		(b) 1,2,4,5,10,20	2	M1 for 2 correct pairs of factors
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		(c) 7	1	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		(d) 4 or 36	1	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7		-	
9       (a) 7.15       2         (b) 3.63       2         10       (a) $\frac{1}{6}$ 1         (b) $\frac{1}{3}$ 1       oe         (b) $\frac{1}{3}$ 1       oe         (c) 0       1       1         11       (a) * See completed table for question 11       3         (b) ** See completed frequency diagram       2         12       (a) # See graph for question 12       2         (b) (3,4)       1         13       (a) 10.92       2				
$\begin{array}{ c c c c c c } \hline (b) & 3.63 & 2 \\ \hline (b) & 3.63 & 2 \\ \hline (c) & 1 \\ \hline (b) & \frac{1}{6} & 1 \\ \hline (b) & \frac{1}{3} & 1 \\ \hline (c) & 0 & 1 \\ \hline (c) & 0 & 1 \\ \hline (a) * See completed table for question 11 & 3 \\ \hline (b) ** See completed frequency diagram & 2 \\ \hline (b) & ** See completed frequency diagram & 2 \\ \hline 12 & (a) # See graph for question 12 & 2 \\ \hline (b) & (3,4) & 1 \\ \hline 13 & (a) & 10.92 & 2 \\ \hline \end{array}$				
10       (a) $\frac{1}{6}$ 1         (b) $\frac{1}{3}$ 1       oe         (c) 0       1         11       (a) * See completed table for question 11       3         (b) ** See completed frequency diagram       2         12       (a) # See graph for question 12       2         (b) (3,4)       1         13       (a) 10.92       2	9	• •		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		(b) 3.63		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	10		1	
11       (a) * See completed table for question 11       3         (b) ** See completed frequency diagram       2         12       (a) # See graph for question 12       2         (b) (3,4)       1         13       (a) 10.92       2		(b) $\frac{1}{3}$	1	oe
(b) ** See completed frequency diagram       2         12       (a) # See graph for question 12       2       M1 for one correct line         (b) (3,4)       1         13       (a) 10.92       2			1	
12       (a) # See graph for question 12       2       M1 for one correct line         (b) (3,4)       1         13       (a) 10.92       2	11	(a) * See completed table for question 11	3	
12       (a) # See graph for question 12       2       M1 for one correct line         (b) (3,4)       1         13       (a) 10.92       2		(b) ** See completed frequency diagram	2	
(b) (3,4)         1           13         (a) 10.92         2	12		2	M1 for one correct line
13 (a) 10.92 2			1	
	13		2	
			2	

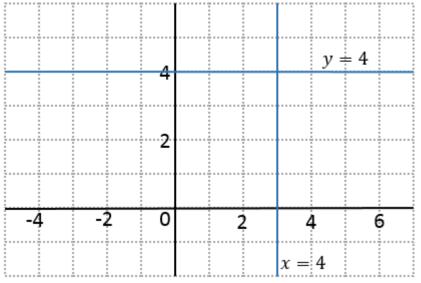
### \* Completed table for question 11

Mark	Tally	Frequency
0 to 9		4
10 to 19	₩1 IIII	9
20 to 29	1111 III I	11
30 to 39	HII I	6

### \* Completed frequency table for question 11



### # Completed graph from question 12



1	108 miles	2	
2	(a) 25%	1	
		_	<b>M1</b> for 15% of £250 = £37.50
	(b) 20% of £190 is bigger	3	<b>M1</b> for 20% of £190 = £38.00
3	50	2	
4	8.75	2	
5	(a) Pentagon	1	
	(b) Isosceles triangle	1	
	(c) Parallelogram	1	
6	−15°C, −3°C, 0°C, 5°C, 8°C	1	
7	(a) XY	1	
	(b) WX (or ZY)	1	
	(c) WX (or ZY)	1	
8	10°C	1	
9	(a) $x = 9$	1	
	(b) $x = 3$	1	
	(c) $x = 56$	1	
10	3 squares shaded	1	
11	(a)	3	
	(b) 4.7cm ( <u>+</u> 0.2 cm)	1	
12	(a) 2	1	
	(b) -9	1	
	(c) -4	1	
13	(d) 6:5 ( <b>oe</b> )	2	
14	(a) * see diagram for question 14	2	M1 for each correct point
	(b) (10,1) & (8,5)	1	
15	(a) $7x + 42$	1	
	(b) $18x - 45$	1	
16	(a) $180 = 40 + 4x$	1	
	(b) $x = 35$	1	

## 7C Half Term Assessment 4 Solutions

### \* Diagram for question 14

