

7H Half Term Assessment 2 Solutions

1	(a) 95°	1	
	(b) 102°	2	M1 for $180 - (39 + 39)$ or $180 - 78$ oe
	(c) 124°	3	M1 for identifying either the angle 69° or 55° M1 for $69 + 55$ oe www
2	(a) 1.4	3	M1 for sight of 28 M1 for dividing their '28' by 20
	(b) The modal number of teachers in a car is 1. 14 is the frequency of that class.	1	oe
3	(a) Any fraction in the range $\frac{1}{2} < x < 1$	1	
	(b) i) $\frac{2}{3}$	1	
	ii) $\frac{5}{7}$	1	
4	(a) Angle of 128° drawn correct to $\pm 2^\circ$	2	B1 if correct angle drawn but not labelled
	(b) i) 71° (within $\pm 2^\circ$)	1	
	ii) 100° (within $\pm 2^\circ$)	1	
5	(a) 12	1	
	(b) 27	1	
6	(a) $x + 12$	1	
	(b) $3a + 9$	1	
	(c) $3m + 10$	1	
7	(a) i) 0.35	1	
	ii) 0.7	1	
	(b) i) 60%	1	
	ii) 2%	1	
8	(a) 36	1	
	(b) 28	2	M for $54 - 26$
	(c) The meetings in 2010 were longer than the meetings in 2009 on average. OR The meetings in 2010 varied more in length than the meetings in 2009.	1	oe oe
9	(a) $\frac{7}{8}$ or oe	2	M1 for $\frac{6+1}{8}$ or other correct common denominator
	(b) $\frac{9}{10}$ or oe	2	M1 for $\frac{5+4}{10}$ or other correct common denominator
	(c) $\frac{5}{24}$ or oe	2	M1 for $\frac{21-16}{24}$ or other correct common denominator Condone attempt to add for M1
10	(a) 37	1	
	(b) 2	1	
11	$x = 36^\circ$	2	M1 for a correct method or stating the equation $5x = 180$

oe means or equivalent

ft means follow through

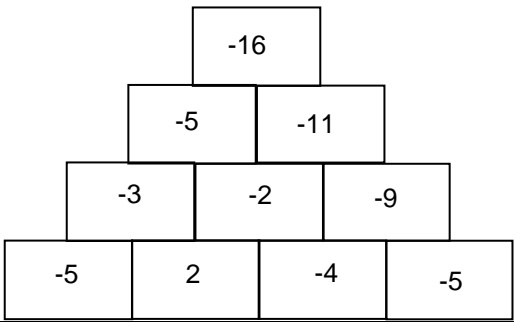

www means without wrong working

7H Half Term Assessment 3 Solutions

1	(a) 13	2	M1 for $207 \div 15$ or 15×13 oe																					
	(b) 12	1																						
2	690 minutes	2	M1 for $11 \times 60 + 30$ oe																					
3	(a) $\frac{2}{6} = \frac{1}{3}$	1	Note that the fraction must be simplified.																					
	(b) 280	2																						
4	(a) 21 42 63	1	A1 for any three correct solutions																					
	(b) 14 and 9	1																						
5	(a) 1 20 2 10 4 5	2	B1 for 4 or 5 correct factors oe																					
	(b) No because it has more than two factors, 1, 3, 7 and 21.	1																						
6	(a)	2	B1 for plotting 3 or 4 points correctly B2 for plotting all 4 points correctly and joining up the coordinates																					
	(b) parallelogram																							
7	(a) 3.63	2	M1 for correct method with not more than one computational error																					
	(b) 1.675	2																						
8	(a) $\frac{3}{9} = \frac{1}{3}$	1	Note that the fraction does not need to be simplified																					
	(b) $\frac{4}{9}$	1																						
9	(a) 9	1																						
	(b) 25	1																						
10	(a)	3	B1 for 1 group correctly tallied or correct total B2 for 3 groups correctly tallied																					
	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 2px;">Height (cm)</th> <th style="padding: 2px;">Tally</th> <th style="padding: 2px;">Frequency</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">$0 \leq h < 20$</td> <td style="padding: 2px;"> </td> <td style="padding: 2px;">2</td> </tr> <tr> <td style="padding: 2px;">$20 \leq h < 40$</td> <td style="padding: 2px;"> </td> <td style="padding: 2px;">7</td> </tr> <tr> <td style="padding: 2px;">$40 \leq h < 60$</td> <td style="padding: 2px;"> </td> <td style="padding: 2px;">9</td> </tr> <tr> <td style="padding: 2px;">$60 \leq h < 80$</td> <td style="padding: 2px;"> </td> <td style="padding: 2px;">14</td> </tr> <tr> <td style="padding: 2px;">$80 \leq h < 100$</td> <td style="padding: 2px;"> </td> <td style="padding: 2px;">8</td> </tr> <tr> <td style="padding: 2px;">Total</td> <td style="padding: 2px;"></td> <td style="padding: 2px;">40</td> </tr> </tbody> </table>			Height (cm)	Tally	Frequency	$0 \leq h < 20$		2	$20 \leq h < 40$		7	$40 \leq h < 60$		9	$60 \leq h < 80$		14	$80 \leq h < 100$		8	Total		40
	Height (cm)			Tally	Frequency																			
	$0 \leq h < 20$				2																			
	$20 \leq h < 40$				7																			
	$40 \leq h < 60$				9																			
	$60 \leq h < 80$				14																			
	$80 \leq h < 100$				8																			
Total		40																						
(b) B2 for all bars correctly drawn	2	B1 for three bars correctly drawn																						
(a) B1 for correctly drawing $y = 3$ B1 for correctly drawing $x = -2$	1																							
(b) $(-2, 3)$	1																							
13	(a) 901		2	M1 for correct method with not more than one computational error																				
	(b) 90.1		1																					
	(c) 9.01		1																					
14	(a) B (b) D (c) C (d) A		2	B1 for 2 or 3 graphs matched correctly																				
15	$\frac{3}{10}$		2	M1 for $\frac{9}{10} \div 3$ oe																				

oe means or equivalent

7H Half Term Assessment 4 Solutions

1	(a) 30%	1	
	(b) £195	2	M1 for a correct attempt to find 75% with not more than one computational error
2	50	2	M1 for $x = 3 \times 12 + 2 \times 7 = 36 + 14$ oe
3	1.8125	2	M1 for $0.8125 \div 13 = 0.0625$ $0.0625 \times 29 = 1.8125$ oe
4	Esha $\frac{7}{50} = 0.14$	1	M1 for a proportion connected to Esha
	Fran $\frac{11}{70} = 0.157$	1	M1 for a proportion connected to Fran
	Fran	1	B1 for a correct deduction with supporting evidence
5	(a) pentagon	1	
	(b) isosceles triangle	1	
	(c) trapezium	1	
6	(a) B3 for correctly drawn triangle	3	B1 for length of 7cm (± 1 mm) B1 for sight of an attempt at the correct construction with one length correctly represented (± 1 mm)
	(b) $58^\circ - 62^\circ$	1	ft from their answer to (a)
	(c) $68 + 40 + 62 = 170$ and the angles in a triangle add up to 180° .	1	oe
7	90%	2	M1 for $\frac{18}{20} = \frac{90}{100}$ oe fraction
8	(a) $x = 8$	1	
	(b) $x = 48$	1	
	(c) $x = 3$	2	M1 for $8x = 24$ OR correct method with not more than one computational error
9		2	A1 for 3 correct values
10		2	B2 for shading in any nine squares SC1 for shading in six squares
11	(a) They both have two pairs of parallel sides. OR Their interior angles both add up to 360° . OR Opposite sides in both are equal in length.	1	OR Any other acceptable answer
	(b) A rectangle has four right angles.	1	
12	(a) 4	1	
	(b) -9	1	
	(c) 2	1	
13	(a) $10m + 8$	1	
	(b) $xy - x^2$	1	
14	$3(x - 5) + 7 = 10$	1	B1 for any correct statement of the equation
	$x = 6$	2	M1 for correct method to solve the equation with not more than one computational error
15	$1 : 1.75$	2	M1 for $7 \div 4 = 1.75$ oe

oe means or equivalent

ft means follow through