



THIRD SPACE  
LEARNING

# Year 8

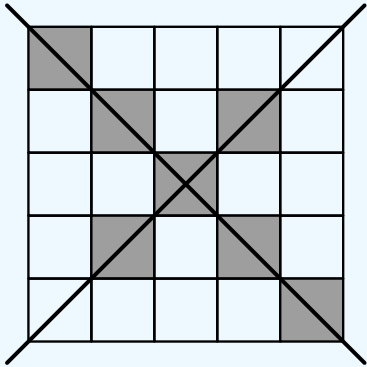
# Maths Test

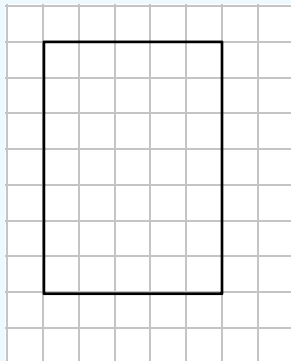
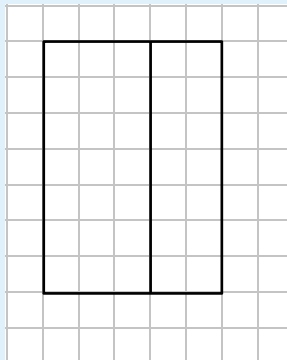
# Mark Scheme

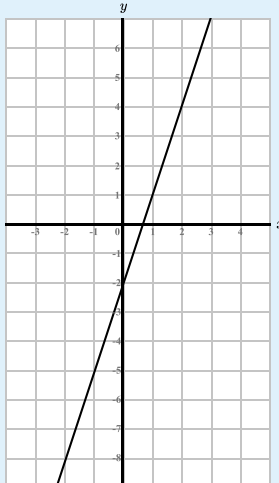
KS3 Maths

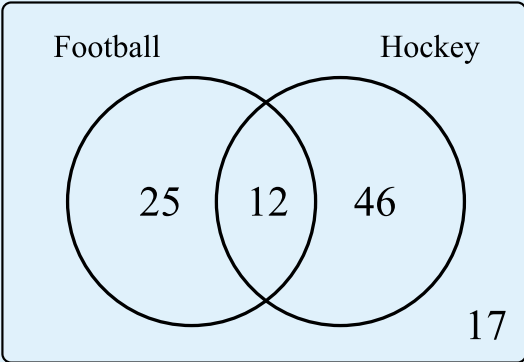
# Mark scheme and grade boundaries

Mark	Old National Curriculum Level	New GCSE grade
0 - 8	3	-
9 - 20	4	1
21 - 34	5	2
35 - 43	6	3
44 - 50	7	4

Question	Calculation	Answer	Notes
Q1a		29, 35	
Q1b		Add 6	
Q1c	No because all the numbers in the sequence are odd		Must include a correct reason which could be listing the sequence up to 100
Q2a			Either line of symmetry
Q2b		2	
Q3a		2	
Q3b	Laptops 17 Tablets 16	Laptops	
Q4a		14.3	
Q4b			Any correct value greater than or equal to 495 and less than 505

Question	Calculation	Answer	Notes						
Q5a		129cm							
Q5b	$\frac{132 + 129 + 119 + 125 + 130 + 129 + 128 + 131 + 129 + 130}{10}$ = 128.2	128.2cm	M1 Evidence of attempt to add all values and divide by 10						
Q6a	£4.70 + £5.60 = £10.30	£10.30	M1 £4.70 and £5.60 seen						
Q6b	£23 – £3.10 – £3.10 = £16.80 £16.80 ÷ 3 = £5.60	Large	M1 £23 – £3.10 – £3.10 M1 <i>ft</i> their £16.80 ÷ 3						
Q7a		<table><tr><td>Number of faces</td><td>8</td></tr><tr><td>Number of edges</td><td>18</td></tr><tr><td>Number of vertices</td><td>12</td></tr></table>	Number of faces	8	Number of edges	18	Number of vertices	12	M1 2 correct
Number of faces	8								
Number of edges	18								
Number of vertices	12								
Q7b			M1 Rectangle with either length or width correct						

Question	Calculation	Answer	Notes										
Q8	Multiples of 8: 56, 64, 72, 80, 88, 96 Factors of 192: 64, 96 One less than prime number: 96	96	M1 At least 5 multiples of 8 between 50 and 100 listed M1 64 and 96 identified as factors of 192										
Q9a	$6y + 10 - 4y - 8 = 2y + 2$	$2y + 2$	M1 $6y + 10 \pm 4y \pm 8$										
Q9b	$18x + 66 = 30$ $18x = -36$ $x = -2$	$x = -2$	M1 $18x + 66 = 30$ or $3x + 11 = 5$										
Q10a		<table><tr><td><math>x</math></td><td>-1</td><td>0</td><td>1</td><td>2</td></tr><tr><td><math>y</math></td><td>-5</td><td>-2</td><td>1</td><td>4</td></tr></table>	$x$	-1	0	1	2	$y$	-5	-2	1	4	
$x$	-1	0	1	2									
$y$	-5	-2	1	4									
Q10b													

Question	Calculation	Answer	Notes
<b>Q10c</b>			Any line starting $y = 3x$
<b>Q11a</b>	$100 - (46 + 17 + 12) = 25$		M1 12 and 17 placed correctly
<b>Q11b</b>		$\frac{37}{100}$	
<b>Q12a</b>	She's just added the numerators and the denominators - she should have written them with a common denominator		
<b>Q12b</b>	He has multiplied both the numerator and the denominator by 5 - he should have only multiplied the numerator		
<b>Q13</b>	$\pi d = 75.4$ $d = \frac{75.4}{\pi} = 24.00056542\dots$ $r = 12.00028271$ $\text{Area} = \pi \times 12.000\dots^2 = 452.4$	$452.4\text{cm}^2$	

Question	Calculation	Answer	Notes
<b>Q14a</b>		$a^7$	
<b>Q14b</b>		$6b^5$	M1 6 or $b^5$ seen
<b>Q15a</b>	20% of 160 = 32 $160 - 32 = £128$	£128	
<b>Q15b</b>	Sion is incorrect - they have been reduced by less than 40% $0.8 \times 0.8 = 0.64$ so a 36% reduction		M1 correct statement ticked A correct supporting explanation
<b>Q16</b>	180 in the ratio 1:4 is 36:144 $360 \div 36 = 10$	10	M1 Attempt to divide 180 in the ratio 1:4 M1 $36^\circ$ identified as exterior angle

# Help ease the pressure with a personalised revision programme for each of your target KS4 students

Our one to one GCSE revision programme is designed to help your target students reach their potential in their GCSE maths exams.

Our specialist maths tutors work one to one with each student, focusing on securing core KS4 content and building familiarity with the kinds of questions they'll be tackling in their GCSE exams.

Get in touch today:

✉ [hello@thirdspacelearning.com](mailto:hello@thirdspacelearning.com)

🔍 [thirdspacelearning.com](https://thirdspacelearning.com)

☎ 0203 771 0095