
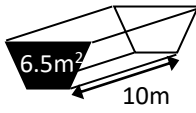
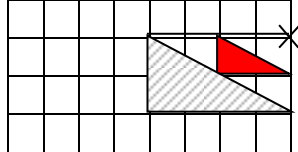
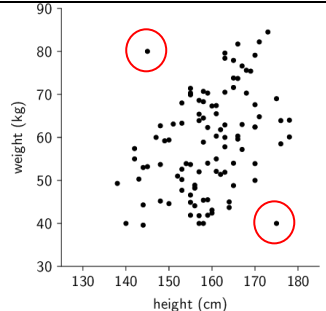


Maths Key Skills

Stage 8: Skill Check 4 - Answers

Name: Date:

Class/Group:

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability																
1. Work out: $60 \div 0.2$	^{8:1} 300	11. Expand & simplify: $(m + 3)(2m + 2)$	^{8:16} $2m^2+8m+6$	21. The probability of winning the top prize in a draw is 0.06. What is the probability of NOT winning it?	^{8:26} 0.94															
2. Write 18 as the product of its prime factors.	^{8:2} 2×3^2	12. The ratio of blue: red balls in a box is 7:3. Write the proportion of RED in the box as a fraction	^{8:17} $\frac{3}{10}$																	
3. Estimate by rounding to 1sf an answer to: $77.3 \div 3.65$	^{8:3} $80 \div 4 = 20$	13. 7litres of purple paint are made by mixing red and blue in a ratio of red to blue 3litres: 4litres. How much blue paint is needed for 35litres of purple paint?	^{8:18} 20litres	22. Of the 64 dogs, 28 are male. Last year 10 of the males and 16 of the females were found homes. How many of the females were NOT found homes?	^{8:27} 20															
4. Evaluate: 2^5	^{8:4} 32	14. A bike bought for £80 was sold for 25% more. Complete the sum to find the selling price.	^{8:19} 80×1.25																	
5. Factorise: $10x - 15$	^{8:6} $5(2x-3)$	15. Water flows at a rate of 8 litres in 10 minutes. What is the rate in litres/hour?	^{8:20} 48litres/h	23. A coin is tossed twice. What is the probability of tossing a HEAD and a TAIL?	^{8:28} <i>HH,HT,TH,TT</i> $\frac{2}{4} = \frac{1}{2}$															
6. Simplify: 2^{-1}	^{8:7} $\frac{1}{2}$	16. What is the sum of the exterior angles of a hexagon?	^{8:21} 360°																	
7. Make 'e' the subject of the formula $d = e - f$	^{8:8} $e = d + f$	17. Work out the area of a circle with radius 7cm in terms of π .	^{8:22} $49\pi \text{ cm}^2$	24. Estimate the mean score  <table border="1" data-bbox="1451 917 1881 1077"> <thead> <tr> <th>Score</th> <th>Frequency</th> <th>fx</th> </tr> </thead> <tbody> <tr> <td>1-5</td> <td>2</td> <td>$2 \times 3 = 6$</td> </tr> <tr> <td>6-10</td> <td>5</td> <td>$5 \times 8 = 40$</td> </tr> <tr> <td>11-15</td> <td>9</td> <td>$9 \times 13 = 117$</td> </tr> <tr> <td>16-20</td> <td>4</td> <td>$4 \times 18 = 72$</td> </tr> </tbody> </table> $\Sigma f = 20$ $\Sigma fx = 235$ Mean = $\frac{\Sigma fx}{\Sigma f} = \frac{235}{20}$	Score	Frequency	fx	1-5	2	$2 \times 3 = 6$	6-10	5	$5 \times 8 = 40$	11-15	9	$9 \times 13 = 117$	16-20	4	$4 \times 18 = 72$	^{8:29} 11.75
Score	Frequency	fx																		
1-5	2	$2 \times 3 = 6$																		
6-10	5	$5 \times 8 = 40$																		
11-15	9	$9 \times 13 = 117$																		
16-20	4	$4 \times 18 = 72$																		
8. Solve: $4y + 2 = 2y - 8$	^{8:10} $2y = -10$ $y = -5$	18. Work out the volume of this prism. 	^{8:23} $65m^3$																	
9. What is the gradient of the graph with the equation: $y = 5 - 2x$	^{8:12} -2	19. Enlarge triangle by sf $\frac{1}{2}$ centre X 	8:24	25. Circle the outliers 	8:30															
10. Give the nth term of the sequence: 1, 4, 7, 10, 13	^{8:15} $3n - 2$	20. A map scale is 1:50000. What would 10cm represent in kilometres?	^{8:25} 5km																	
Total (A)		Total (B)		Total (C)																

Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)
--------------------	--	---------	-----------	-----------