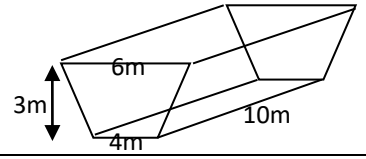
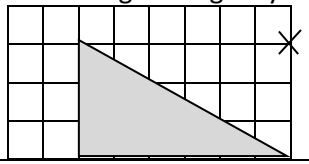
Maths Key Skills **Stage 8: Skill Check 5**

Name: ..... Date: ..... Class/Group: .....

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability	
1. Work out: 0.8 x 0.3	*8:1*	11. Expand & simplify: $(p + 2)^2$	*8:16*	21. The probabilities of getting each number on a spinner is shown below 1: 0.15, 2: 0.05, 3: 0.2, 4: 0.15, 5: x Find x	*8:26*
2. Write 40 as the product of its prime factors.	*8:2*	12. The ratio of dogs : cats in a rescue centre is 4:5. What proportion of animals in the centre are cats?	*8:17*		
3. Estimate by rounding to 1sf an answer to: 97.2 x 1.57	*8:3*	13. Purple paint is made by mixing red and blue in a ratio of red 3 : 4. How many litres of purple paint could I make with 9 litres of red?	*8:18*	22. Of 30 students 14 were boys. 5 boys & 8 girls took packed lunch. Find the probability that a student chosen will be a girl & does not take packed lunch?	*8:27*
4. Evaluate: 4^5	*8:4*	14. A bike bought for £100 was sold for 20% less. What was the selling price?	*8:19*		
5. Factorise: ax + ay	*8:6*	15. A vehicle travelled 15 miles in 2½ h. What was the speed in mph?	*8:20*	23. A dice is thrown twice. Write down the ways of obtaining a total score of 10.	*8:28*
6. Simplify: $3y \times 2y^4$	*8:7*	16. What is the size of one of the exterior angles of a hexagon?	*8:21*		
7. Make 'm' the subject of the formula: y = mx	*8:8*	17. Work out the circumference of a circle with radius 3cm in terms of π.	*8:22*	24. What is the median class interval?	*8:29*
8. Solve: 3y - 4 = 2y - 7	*8:10*	18. Work out the volume of this prism. 	*8:23*		
9. What is the gradient of the graph with the equation: y = 1 – 3x	*8:12*	19. Enlarge triangle by sf ⅓ centre X 	*8:24*	25. What correlation would you expect to see on a scatter graph showing the following two variables? • Number of days absent from school • Rate of progress	*8:30*
10. Give the nth term of the sequence 5 7 9 11 13	*8:15*	20. A map scale is 1:50000. What would 4cm represent in kilometres?	*8:25*		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	

Score	Frequency
1-5	2
6-10	5
11-15	9
16-20	3