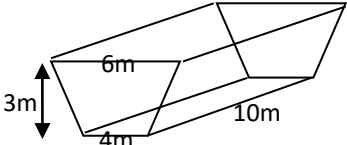
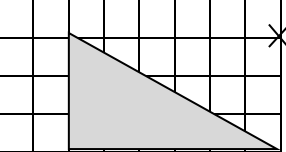


Maths Key Skills

Stage 8: Skill Check 5

Name: Date: Class/Group:

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability											
1. Work out: 0.8×0.3	8:1	11. Expand & simplify: $(p + 2)^2$	8:16	21. The probabilities of getting each number on a spinner is shown below	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	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>0.15</td> <td>0.05</td> <td>0.2</td> <td>0.15</td> <td>x</td> </tr> </table> Find x	1	2	3	4	5	0.15	0.05	0.2	0.15	x	
1	2	3	4	5											
0.15	0.05	0.2	0.15	x											
3. Estimate by rounding to 1sf an answer to: 97.2×1.57	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	23. A dice is thrown twice. Write down the ways of obtaining a total score of 10.	8:28										
5. Factorise: $ax + ay$	8:6	15. A vehicle travelled 15 miles in $2\frac{1}{2}$ h. What was the speed in mph?	8:20												
6. Simplify: $3y \times 2y^4$	8:7	16. What is the size of one of the exterior angles of a hexagon?	8:21	24. What is the median class interval?	8:29										
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			<table border="1"> <thead> <tr> <th>Score</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>1-5</td> <td>2</td> </tr> <tr> <td>6-10</td> <td>5</td> </tr> <tr> <td>11-15</td> <td>9</td> </tr> <tr> <td>16-20</td> <td>3</td> </tr> </tbody> </table>	Score	Frequency	1-5	2	6-10	5	11-15	9	16-20
Score	Frequency														
1-5	2														
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11-15	9														
16-20	3														
8. Solve: $3y - 4 = 2y - 7$	8:10	18. Work out the volume of this prism. 	8:23	25. What correlation would you expect to see on a scatter graph showing the following two variables? <ul style="list-style-type: none"> • Number of days absent from school • Rate of progress 	8:30										
9. What is the gradient of the graph with the equation: $y = 1 - 3x$	8:12	19. Enlarge triangle by sf $\frac{1}{3}$ centre X 	8:24												
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)											