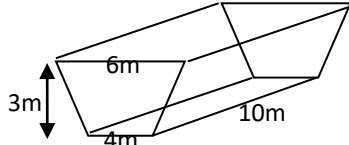
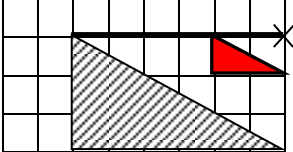


**Maths Key Skills**

Name: ..... Date: .....

**Stage 8: Skill Check 5 - Answers**

Class/Group: .....

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability											
1. Work out: $0.8 \times 0.3$	<sup>8:1</sup> <b>0.24</b>	11. Expand & simplify: $(p + 2)^2$	<sup>8:16</sup> <b><math>p^2+4p+4</math></b>	21. The probabilities of getting each number on a spinner is shown below <table border="1" style="margin: 5px auto;"><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	<sup>8:26</sup> <b>1-0.55 = 0.45</b>
1	2	3	4	5											
0.15	0.05	0.2	0.15	x											
2. Write 40 as the product of its prime factors.	<sup>8:2</sup> <b><math>2^3 \times 5</math></b>	12. The ratio of dogs : cats in a rescue centre is 4:5 . What proportion of animals in the centre are cats?	<sup>8:17</sup> <b><math>\frac{5}{9}</math></b>	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?	<sup>8:27</sup> <b><math>\frac{8}{30} = \frac{4}{15}</math></b>										
3. Estimate by rounding to 1sf an answer to: $97.2 \times 1.57$	<sup>8:3</sup> <b><math>100 \times 2 = 200</math></b>	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?	<sup>8:18</sup> <b>21 litres</b>	23. A dice is thrown twice. Write down the ways of obtaining a total score of 10.	<sup>8:28</sup> <b>4/6; 5/5; 6/4</b>										
4. Evaluate: $4^5$	<sup>8:4</sup> <b>1024</b>	14. A bike bought for £100 was sold for 20% less. What was the selling price?	<sup>8:19</sup> <b>£80</b>												
5. Factorise: $ax + ay$	<sup>8:6</sup> <b><math>a(x + y)</math></b>	15. A vehicle travelled 15 miles in $2\frac{1}{2}$ h. What was the speed in mph?	<sup>8:20</sup> <b>6mph</b>	24. What is the median class interval? <table border="1" style="margin: 5px auto;"><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	3	<sup>8:29</sup> <b>11-15</b>
Score	Frequency														
1-5	2														
6-10	5														
11-15	9														
16-20	3														
6. Simplify: $3y \times 2y^4$	<sup>8:7</sup> <b><math>6y^5</math></b>	16. What is the size of one of the exterior angles of a regular hexagon?	<sup>8:21</sup> <b><math>60^\circ</math></b>												
7. Make 'm' the subject of the formula: $y = mx$	<sup>8:8</sup> <b><math>m = \frac{y}{x}</math></b>	17. Work out the circumference of a circle with radius 3cm in terms of $\pi$ .	<sup>8:22</sup> <b><math>6\pi</math> cm</b>	25. What correlation would you expect to see on a scatter graph showing the following two variables? <ul style="list-style-type: none"><li>• Number of days absent from school</li><li>• Rate of progress</li></ul>	<sup>8:30</sup> <b>negative</b>										
8. Solve: $3y - 4 = 2y - 7$	<sup>8:10</sup> <b><math>y = -3</math></b>	18. Work out the volume of this prism. 	<sup>8:23</sup> <b><math>15 \times 10 = 150m^3</math></b>												
9. What is the gradient of the graph with the equation: $y = 1 - 3x$	<sup>8:12</sup> <b>-3</b>	19. Enlarge triangle by sf $\frac{1}{2}$ centre X 	<sup>8:24</sup>	20. A map scale is 1:50000. What would 4cm represent in kilometres?	<sup>8:25</sup> <b>2km</b>										
10. Give the nth term of the sequence 5 7 9 11 13 .....	<sup>8:15</sup> <b><math>2n + 3</math></b>														
Total (A)		Total (B)		Total (C)											
Test Total (A+B+C)		R (0-9)		G (20-25)											
				Y (10-19)											