
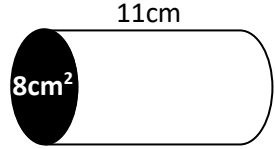
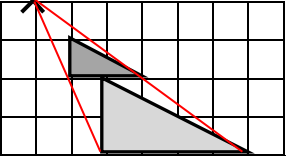
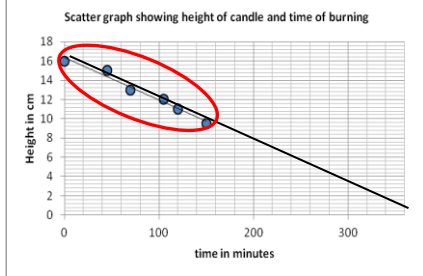


Maths Key Skills

Name: Date:

Stage 8: Skill Check 6 - Answers

Class/Group:

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability											
1. Work out: $0.8 \div 0.02$	8:1 $80 \div 2 = 40$	11. Expand & simplify: $(2d - 1)^2$	8:16 $4d^2 - 4d + 1$	21. The probabilities of getting each colour on a spinner are shown below. Find x	8:26 $1 - 0.55 = 0.45$										
2. Write 30 as the product of its prime factors.	8:2 $2 \times 3 \times 5$	12. The ratio of adults : students on a trip is 1:4. What proportion of the group on the trip are students?	8:17 $\frac{4}{5}$	<table border="1"> <tr> <td>Red</td> <td>Blue</td> <td>Green</td> <td>Yellow</td> </tr> <tr> <td>0.32</td> <td>0.08</td> <td>x</td> <td>0.15</td> </tr> </table>	Red	Blue	Green	Yellow	0.32	0.08	x	0.15			
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3. Estimate by rounding to 1sf an answer to: $6.14 \div 0.49$	8:3 $6 \div 0.5 = 12$	13. To make pink paint, Annie needs 1 tin of red and 3 tins of white. Describe the relationship between the 2 colours.	8:18 R:W= 1:3 or W=3xR or $\frac{3}{4}$ of paint is white	22. Of 28 students 16 were boys. 3 boys and 5 girls wear glasses. Find the probability that a student chosen will be a girl & does not wear glasses?	8:27 $\frac{7}{28} = \frac{1}{4}$										
4. Evaluate: $\sqrt[3]{2187}$ 	8:4 3	14. A bike bought for £100 was sold for 20% less. Complete the multiplication sum to find the selling price?	8:19 100×0.8												
5. Factorise $8x - 12$	8:6 $4(2x - 3)$	15. A vehicle travelled 56km/h. What was the speed in mph? (8km=5miles)	8:20 35mph	23. A dice is thrown twice. Write down the ways of obtaining a total score of 6	8:28 1/5; 2/4; 3/3; 4/2; 5/1										
6. Simplify $y^2 + y^2 + y^2$	8:7 $3y^2$	16. What is the size of one of the exterior angles of a pentagon?	8:21 72°												
7. Make 'b' the subject of the formula: $a = b - c$	8:8 $b = a + c$	17. Work out the area of a circle with radius 5cm in terms of π .	8:22 $25\pi \text{ cm}^2$	24. What is the modal class interval?	8:29 11-15										
8. Solve: $3(x + 1) = x + 8$	8:10 $3x + 3 = x + 8$ $2x = 5$ $x = 2.5$	18. Work out the volume of this prism. 	8:23 $8 \times 11 = 88 \text{ cm}^3$	<table border="1"> <tr> <th>Score</th> <th>Frequency</th> </tr> <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> </table>	Score	Frequency	1-5	2	6-10	5	11-15	9	16-20	3	
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9. What is the gradient of the graph with the equation: $y = 5x + 8$	8:12 5	19. Describe the transformation B to A 	8:24 Enlargement Sf=1/2 Centre X	25. Indicate on the graph where you could interpolate 	8:30										
10. Give the nth term of the sequence: 3 8 13 18 23	8:15 $5n - 2$	20. A model boat is made to a scale 1:20. The model boat is 15cm long. How long is the real boat?	8:25 $300 \text{ cm} = 3 \text{ m}$												
Total (A)		Total (B)		Total (C)											
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)											