

# Maths Key Skills

Name: .....

Date: .....

# Stage 9: Skill Check 7

Class/Group: .....

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Geometry & Measure, Statistics & Probability									
1. Write <b>40 000</b> in standard form	9:1	11. Work out the <b>balance</b> on £600 over 2 years at 4% simple interest	9:13	21. Work out the p(neither B nor C)	9:27								
2. Write <b>0.00007</b> in standard form	9:1	12. A bill £198 includes a 10% service charge. Find the bill prior to the charge.	9:14										
3. 200 has been rounded to nearest 100. Express the limits in the form $a \leq x < b$	9:2	13. Mass=4800kg Density = 800kg/m <sup>3</sup> . What is the Volume?	9:15										
4. Factorise: $x^2 + 6x + 5$	9:4	14. Are x & y in DIRECT or INVERSE proportion? <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>x</td> <td>1</td> <td>2</td> <td>4</td> <td>8</td> </tr> <tr> <td>y</td> <td>80</td> <td>40</td> <td>20</td> <td>10</td> </tr> </table>	x			1	2	4	8	y	80	40	20
x	1	2	4	8									
y	80	40	20	10									
5. If $3 \leq x \leq 8$ , show the solution for x on the number line	9:5	15. The two shapes are similar. Find x 	9:17	22. I meet 2 sets of traffic lights. Complete the tree diagram.	9:28								
6. Make 'p' the subject of the equation $q = \frac{p}{r} + s$	9:6	16. Work out the area of the $\frac{1}{4}$ circle (to 3sf) 	9:18		9:28								
7. Solve the equation: $\frac{y}{2} + \frac{y}{4} = 1$	9:7	17. Work out the curved surface area of this cylinder in terms of $\pi$ $r=3\text{cm}$ 	9:20	23. Use the tree diagram to work out the probability of that I meet RED only on the second set.	9:28								
8. Write down the equation of a line parallel to $2x + y = 7$	9:8	18. Give the condition of congruency: 	9:21	24. Name the shortest distance from X to the line YZ 	9:26								
9. Give the gradient & its meaning 	9:9	19.  Work out length 'x' (to 1dp)	9:22	25. To do a survey on Year 9, the teacher took the lists and chose every 5 <sup>th</sup> person. Do you think this was a good method to get a sample? Give a reason.	9:29								
10. Evaluate $T = 2x^3$ when $x = 3$	9:12	20. Complete the sentence $\dots 53 = \frac{x}{7}$	9:23	<b>YES or NO - circle your response.</b> <b>Reason</b> ..... .....									
Total (A)		Total (B)		Total (C)									
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)									