

Maths Key Skills

Name:

Date:

Stage 9: Skill Check 1

Class/Group:

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Geometry & Measures, Statistics & Probability	
1. Write 38000 in standard form notation.	9:1	11. Work out the simple interest on £400 over 2 years at 8% interest.	9:13	21. Out of 40 students, 14 take Biology and 29 take Chemistry, 2 take neither. Complete the Venn diagram. <div style="text-align: center; border: 1px solid black; padding: 5px; margin: 10px 0;"> </div>	9:27
2. Write 0.0045 in standard form notation.	9:1	12. In a 60% off sale, a jumper is priced at £16.80. Find the original price.	9:14		
3. 30m has been rounded to 1sf. Express the limits in the form $a \leq x < b$	9:2 $\leq x <$	13. What is the formula to find density? D =	9:15		
4. Factorise: $x^2 + 7x + 6$	9:4	14. The time taken to dig a hole is indirectly proportional to the number of people doing the digging. TRUE or FALSE?	9:16	22. The probability a team will win cricket is 0.7, & of winning football is 0.9. Complete the tree diagram. <div style="text-align: center; border: 1px solid black; padding: 5px; margin: 10px 0;"> </div>	9:28
5. Solve: $3x - 1 \geq 8$ and show the solution on the number line.	9:5	15. The two shapes are similar. Find x.	9:17		
6. Make 'y' the subject of the equation: $2y - 3x = 8$	9:6	16. In multiples of π , work out the perimeter of a semicircle of diameter 10cm.	9:18	23. Use the tree diagram to work out the probability that the team will lose both games	9:28
7. Solve the equation: $\frac{x}{3} + 5 = 6$	9:7	17. Work out the curved surface area of this cylinder in terms of π	9:20		
8. Write down the equation of a line parallel to: $y = 2x - 5$	9:8	18. Give the condition of congruency:	9:21	24. Construct the bisector of the angle	9:25
9. Give the rate of change	9:9	19. To find 'a' choose one calculation: $\sqrt{4^2 + 3^2}$ OR $\sqrt{4^2 - 3^2}$	9:22		
10. Evaluate: $a^2 - a$ when $a = -5$	9:12	20. If $\tan 32^\circ = \frac{x}{8}$, work out x (1sf)	9:23	25. A coin is tossed 10 times. The result was 8 Heads and 2 Tails. Do you think the coin is biased? Give a reason to support your decision YES or NO or DON'T KNOW - circle your response. Reason	9:29
Total (A)		Total (B)			
Test Total (A+B+C)		R (0-9)	Y (10-19)	Total (C)	G (20-25)