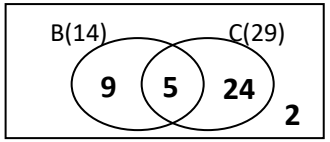
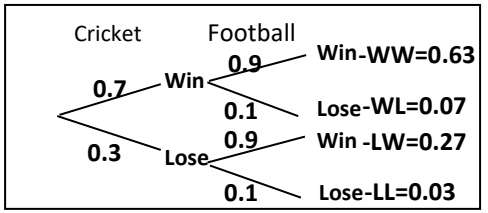
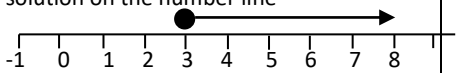
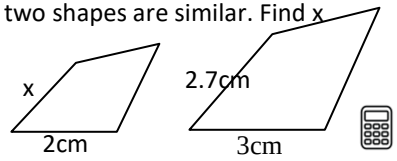
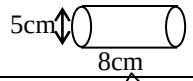
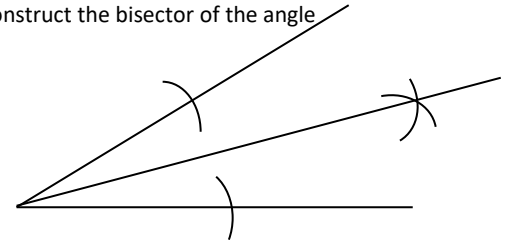
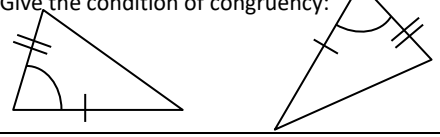
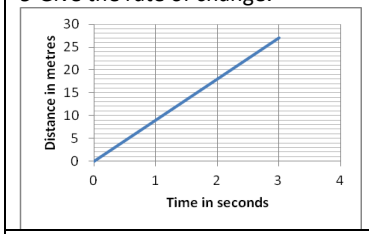
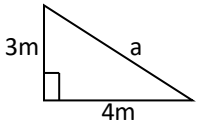
Maths Key Skills **Stage 9: Skill Check 1 - Answers**

Name: ..... Date: ..... Class/Group: .....

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Statistics & Probability	
1. Write 38000 in standard form notation	*9:1* **3.8×10^4**	11. Work out the simple interest on £400 over 2 years at 8% interest per annum	*9:14* **£64**	21. Out of 40 students, 14 take Biology and 29 take Chemistry, 2 take neither. Complete the Venn diagram 	*9:27*
2. Write 0.0045 in standard form notation	*9:1* **4.5×10^{-3}**	12. In a 60% off sale, a jumper is priced at £16.80. Find the original price.	*9:15* **£42**		
3. 30m has been rounded to 1sf Express the limits in the form a ≤ x < b	*9:2* **25 ≤ x < 35**	13. What is the formula to find density?	*9:16* **D=M/V**		
4. Factorise: $x^2 + 7x + 6$	*9:4* **(x+6)(x+1)**	14. The time taken to dig a hole is indirectly proportional to the number of people doing the digging. TRUE or FALSE?	*9:17* **TRUE**	22. The probability a team will win cricket is 0.7 & of winning football is 0.9. Complete the tree diagram. 	*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 	*9:18* **1.8cm**		
6. Make 'y' the subject of the equation: $2y - 3x = 8$	*9:6* **$y=\frac{3x+8}{2}$** **$y=\frac{3}{2}x+4$**	16. In multiples of π, work out the perimeter of a semicircle of diameter 10cm	*9:19* **5π+10**	23. Use the tree diagram to work out the probability that the team will lose both games	*9:28* **0.03**
7. Solve the equation: $\frac{x}{3} + 5 = 6$	*9:7* **x=3**	17. Work out the curved surface area of this cylinder in terms of π 	*9:21* **40π**	24. Construct the bisector of the angle 	*9:25*
8. Write down the equation of a line parallel to y = 2x – 5	*9:8* **y=2x ± ?**	18. Give the condition of congruency: 	*9:22* **SAS**		
9 Give the rate of change. 	*9:9* **9m/s**	19.  To find 'a' choose one calculation: $\sqrt{4^2 + 3^2}$ OR $\sqrt{4^2 - 3^2}$	*9:23* **$\sqrt{4^2 + 3^2}$**	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** **Insufficient number of trials to enable a decision. The larger the number of trials the more reliable the outcome.**	*9:29*
10. Evaluate: $a^2 - a$ when a = - 5	*9:12* **30**	20. If $\tan32^0 = \frac{x}{8}$, work out x (1sf)	*9:23* **5**		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	