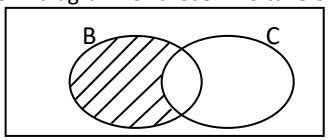
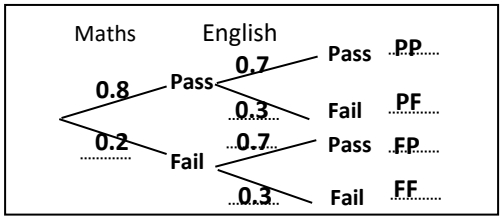
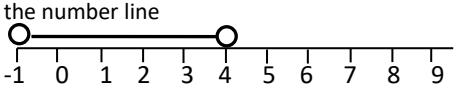
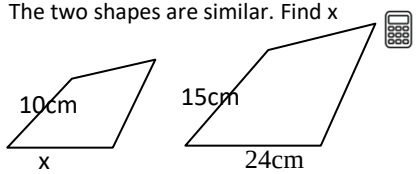
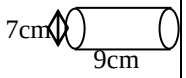
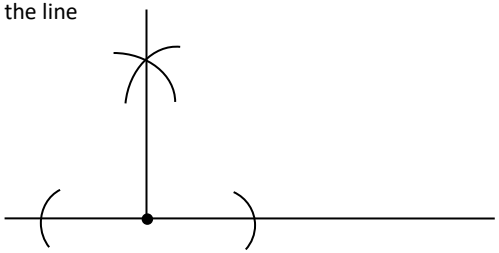
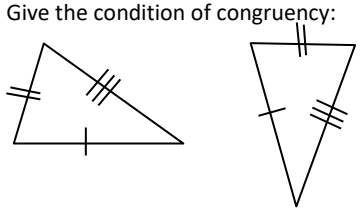
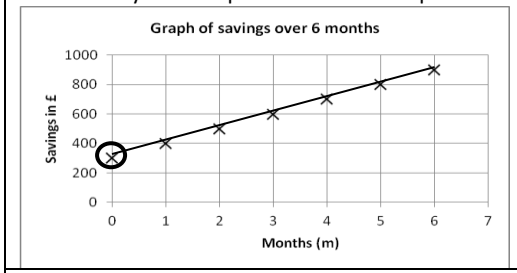
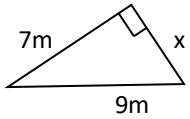
Maths Key Skills **Stage 9: Skill Check 3 - Answers**

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

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Geometry & Measure, Statistics & Probability	
1. Write 2450 in standard form	*9:1* **2.45×10^3**	11. Work out the simple interest on £600 over 2 years at 4% interest	*9:13* **£48**	21. Group B take Biology and group C take Chemistry. Shade the Venn diagram for those who take only Biology. 	*9:27*
2. Write 0.0002 in standard form	*9:1* **2×10^{-4}**	12. A car is reduced by 30% to £8400. Find the original cost?	*9:14* **£12000**		
3. 2.4cm has been rounded to 1dp Express the limits in the form a < x ≤ b	*9:2* **2.35<x≤2.45**	13. Volume = $5m^3$. Density = $7130kg/m^3$ What is the mass?	*9:15* **35650kg**		
4. Factorise: $x^2 - 8x + 15$	*9:4* **(x-5)(x-3)**	14. A man earns £20 per hour. His hours and pay are in direct proportion. TRUE or FALSE?	*9:16* **TRUE**	22. The probability of passing Maths is 0.8, & English is 0.7. Complete the tree diagram. 	*9:28*
5. If **-1 < x < 4** and show the solution for **x** on the number line 	*9:5*	15. The two shapes are similar. Find x 	*9:17* Sf=1.5 24÷1.5 **=16cm**		
6. Make 'a' the subject of the equation 2(a-5)=b	*9:6* **$a=\frac{b+10}{2}$**	16. In multiples of π, work out the area of a semicircle of diameter 8cm	*9:18* **Πx4²÷2 $=8\pi\ cm^2$**	23. Use the tree diagram to work out the probability of passing **only one** of the subjects	*9:28* 0.24+0.14 **=0.38**
7. Solve the equation: $\frac{2x}{3} - 2 = 4$	*9:7* **x=9**	17. Work out the curved surface area of this cylinder in terms of π 	*9:20* **2xπx3.5x9 $63\pi\ cm^2$**	24. Construct the perpendicular to the point on the line 	
8. Write down the equation of a line parallel to y = 5-2x	*9:8* **y=±c – 2x**	18. Give the condition of congruency: 	*9:21* **SSS**		
9. What is your interpretation of circled point? 	*9:9* **A lump sum of £300 was initially put into the account**	19.  To find 'x' choose one calculation: Circle choice $\sqrt{7^2 + 9^2}$ OR $\sqrt{9^2 - 7^2}$	*9:22*	25. A survey of 40 is to be done at a Youth Club to find out the activities to include in the programme. The total number of youth members is:	
10. Evaluate A when A= $p^2 - 4p$ and p = -2	*9:12* **12**	20. If $\cos 54 = \frac{x}{5}$, find x (correct to 1dp)	*9:23* **2.9**		

Ages	Boys	Girls
11-14	42	15
15-18	16	37

It was decided to ask 10 from each category.
Do you think this is a fair approach? Give a reason.

YES or **NO** – circle your answer
Reason – The number selected is not representative of the numbers in each category.

Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)		G (20-25)