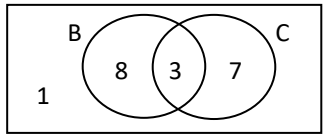
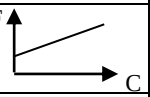
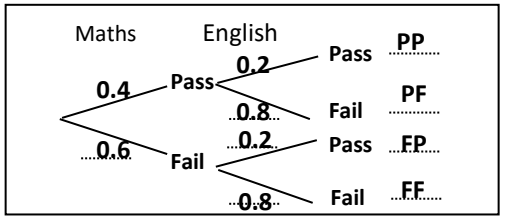
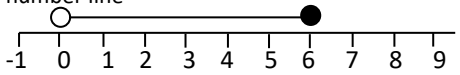
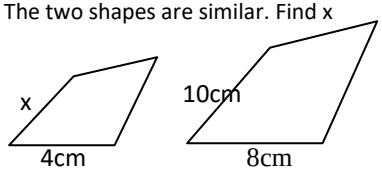
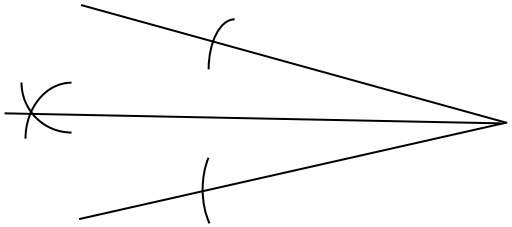
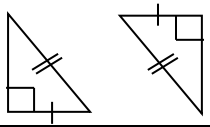
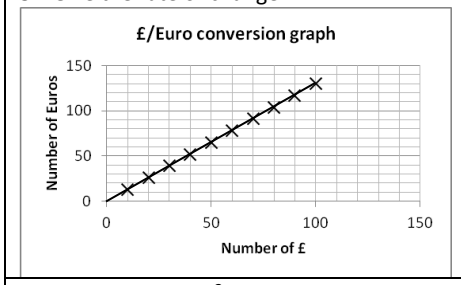
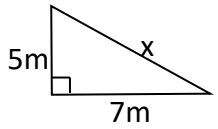
Maths Key Skills **Stage 9: Skill Check 5- Answers**

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

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Geometry & Measure, Statistics & Probability	
1. Write **93 000 000** in standard form	*9:1* **9.3×10^7**	11. Work out the **balance** on £1000 over 3 years at 8% simple interest	*9:13* **£1240**	21. Work out the p(B) 	*9:27* $\frac{11}{19}$
2. Write **0.0072** in standard form	*9:1* **7.2×10^{-3}**	12. A coat cost £84 with 20% off. Find original cost.	*9:14* **£105**		
3. 60 has been rounded to nearest 10 Express the limits in the form a < x ≤ b	*9:2* **55≤x< 65**	13. Mass= 45g. Volume = 5cm³ What is the density?	*9:15* **9g/cm³**		
4. Factorise: $x^2 + 6x + 8$	*9:4* **(x+4)(x+2)**	14. Is this Celsius to Fahrenheit conversion graph in direct proportion? 	*9:16* **NO**	22. The probability of passing Maths is 0.4, & English is 0.2. Complete the tree diagram. 	*9:28*
5. If **0 < x ≤ 6**, show the solution for **x** on the number line 	*9:5*	15. The two shapes are similar. Find x 	*9:17* **5cm**		
6. Make 's' the subject of the equation $v^2 = u^2 + 2as$	*9:6* **$s = \frac{v^2 - u^2}{2a}$**	16. In multiples of π, work out the perimeter of a **quarter-circle** of diameter 8cm	*9:18* **2π+8 cm**	23. Use the tree diagram to work out the probability of failing both of the subjects	*9:28* **0.48**
7. Solve the equation: $\frac{2x+1}{3} = 7$	*9:7* **x=10**	17. Work out the curved surface area of this cylinder in terms of π r=3cm 6cm	*9:20* **2xπx3x6 =36πcm²**	24. Construct the bisector of the angle. 	*9:25*
8. Write down the equation of a line parallel to $x + y = 5$	*9:8* **Y = ±c - x**	18. Give the condition of congruency: 	*9:21* **RHS**		
9. Give the rate of change 	*9:9* **£100=130Euros £1=1.3Euros**	19.  To find 'x' choose one calculation: Circle choice $\sqrt{7^2 + 5^2}$ OR $\sqrt{7^2 - 5^2}$	*9:22*	25. A shop checked how may boxed games were sold in December and used this as a basis for the projected sales for the year. Do you think that this is a good approach? Give a reason for your decision. **YES or NO - circle your response.** **Reason** **Because of Christmas, December sales would not be representative of the rest of the year.**	*9:29*
10. Evaluate $V=5p^3$ when p = 2	*9:12* **5x8=40**	20. $If\ sin38 = \frac{5}{x}$ find x(to 1dp)	*9:23* **8.1**		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	