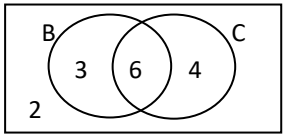
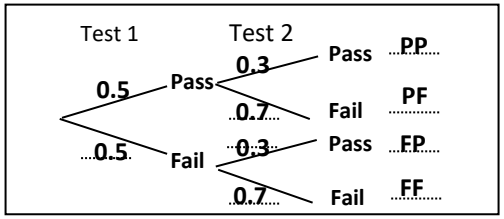
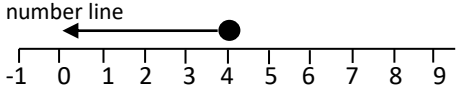
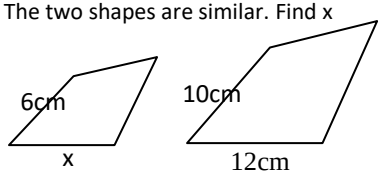
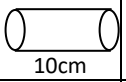
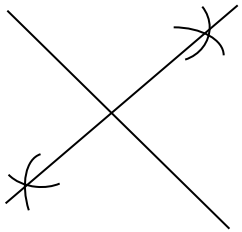
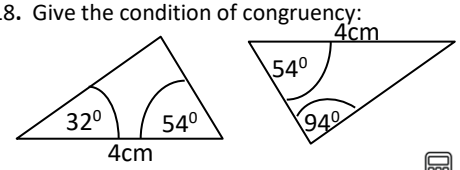
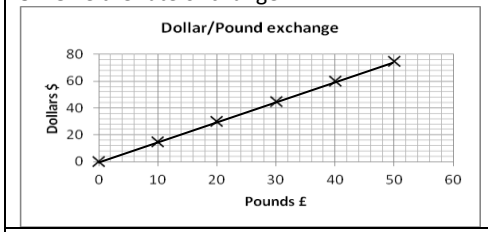
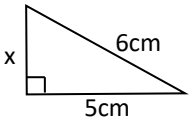
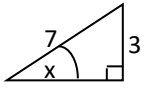
Maths Key Skills **Stage 9: Skill Check 6 - Answers**

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

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Statistics & Probability	
1. Write **8.12 x 10^4** as an ordinary number	*9:1* **81200**	11. Work out the **balance** on £300 over 4 years at 5% compound interest	*9:13* **£364.65**	21. Work out the p(C only) 	*9:27* $\frac{4}{15}$
2. Write **6.5 x 10^{-2}** as an ordinary number	*9:1* **0.065**	12. A suit cost £220 with 20% off. Find original cost.	*9:14* **£275**		
3. 80 has been rounded to nearest 10 Express the limits in the form a ≤ x < b	*9:2* **75≤ x <85**	13. Volume = 5cm³ Density = 10.5g/cm³ What is the mass?	*9:15* **52.5g**		
4. Solve: $x^2 + 6x + 8=0$	*9:4* **x=-4or-2**	14. Is the graph in Q9 in direct proportion?	*9:16* **YES**	22. The probability of passing Test 1 is 0.5 & Test 2 is 0.3. Complete the tree diagram. 	*9:28*
5. If **2x - 5 ≤ 3**, show the solution for **x** on the number line 	*9:5*	15. The two shapes are similar. Find x 	*9:17* **Sf= 10÷6 =5/3 12÷ 5/3 =7.2cm**		
6. Make 'a' the subject of the equation $S = \frac{a}{4} + 8u$	*9:6* **a=4(S-8u)**	16. Work out the perimeter of the ¼ circle (to 3sf) 	*9:18* **17.9cm**	23. Use the tree diagram to work out the probability of passing Test 1 but not Test 2	*9:28* **0.5x0.7 = 0.35**
7. Solve the equation: $\frac{2x-1}{2} = 6$	*9:7* **x=6.5**	17. Work out the curved surface area of this cylinder in terms of π r=7cm 	*9:20* **2xπx7x10 =140πcm²**	24. Construct the perpendicular bisector of this line 	*9:25*
8. Write down the equation of a line parallel to x + y = 6	*9:8* **y= ±c – x or x+y=±c**	18. Give the condition of congruency: 	*9:21* **ASA**		
9. Give the rate of change 	*9:9* **£1≈$1.5**	19.  Work out length 'x' (to 1dp)	*9:22* **√(6² – 5²) =3.3cm**	25. A survey of people coming out of the cinema was conducted. They selected 10 men, 10 women and 10 children. Do you think this is OK? Give a reason for your choice. YES / NO – circle your choice Small sample but also equal numbers of each will not be representative of the population so the outcome could be biased	*9:29*
10. Evaluate $x^2 – 5x$ when x = -4	*9:12* **16+20 =36**	20. Complete the sentence **sin** $x = \frac{3}{7}$ 	*9:23*		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	