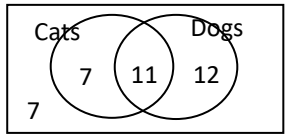
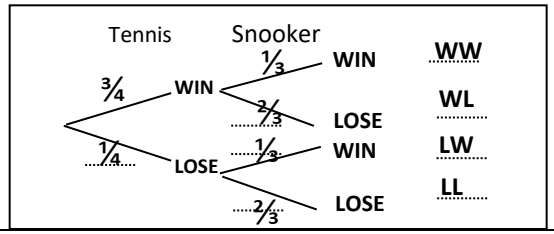
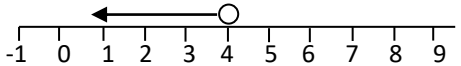
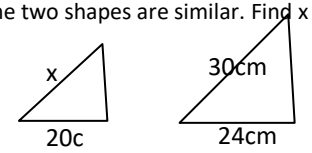
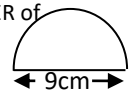
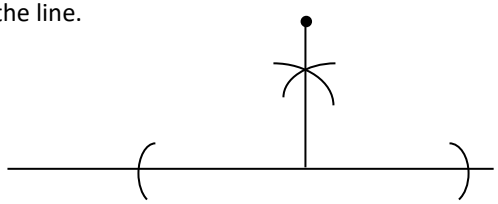
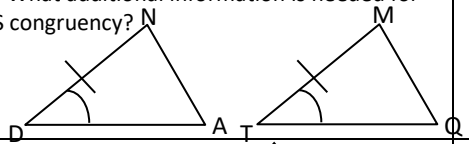
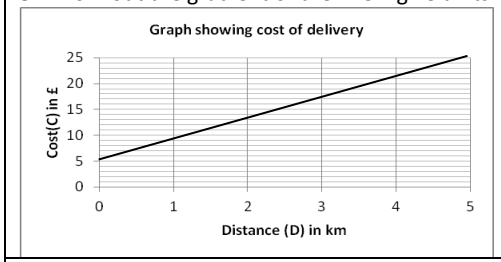
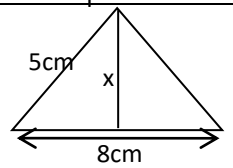
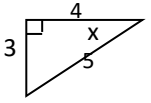
Maths Key Skills **Stage 9: Skill Check 10 - Answers**

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

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Geometry & Measure, Statistics & Probability	
1. Write 16×10^7 in standard form	*9:1* **1.6×10^8**	11. Work out the **balance** on £60 over 2 years at 10% compound interest	*9:13* **£72.60**	21. **37 pupils** in a class 23 have a dog 18 have a cat 7 have neither Complete the Venn diagram 	*9:27*
2. Write 156×10^{-7} in standard form	*9:1* **1.56×10^{-5}**	12. A flat was reduced by 20% to £52 000 Find its original price.	*9:14* **£65 000**		
3. 4.8cm has been rounded to nearest mm Express the limits in the form $a \leq x < b$	*9:2* **$4.75 \leq x < 4.85$**	13. Density 0.7g/cm³ Mass 4.2g What is the Volume?	*9:15* **$6cm^3$**		
4. Solve: $x^2 + 4x + 4 = 0$	*9:4* **x = -2**	14. Is the graph in Q9 showing DIRECT PROPORTION?	*9:16* **NO**	22. Sam plays a game of tennis & a game of snooker 	*9:28*
5. If **$4x - 9 < 7$**, show the solution for **x** on the number line 	*9:5*	15. The two shapes are similar. Find x 	*9:17* **Sf=24÷20 =1.2 x=30÷1.2 25cm**		
6. Make 'a' the subject of the equation $p = \frac{a}{3} + b$	*9:6* **$a = 3(p-b)$**	16. Work out the PERIMETER of the semi-circle (to 3sf) 	*9:18* **π×9÷2+9 =23.1cm**	23. From the tree diagram, work out the probability of losing both games	*9:28* **¼x⅔ =1/6**
7. Solve the equation: $\frac{y-1}{2} + \frac{y+2}{5} = 2$	*9:7* **7y-1=20 y=3**	17. Work out the **TOTAL** surface area of a cylinder with r=3m & h= 8m (3sf)	*9:20* **2×π×3×8 +2×π×3² =207cm²**	24. Construct the perpendicular from the point to the line. 	*9:26*
8. Write down the equation of a line parallel to $y - 3x = 8$	*9:8* **y - 3x=±c or y=3x ±c**	18. What additional information is needed for AAS congruency? 	*9:21* **∠A=∠Q**		
9. Work out the gradient of the line – give units 	*9:9* **£20÷5miles = £4 per km**	19.  Work out length 'x' (to 1dp)	*9:22* **√(5²-4²) = 3cm**	25. At a conference, a survey is done on the first 10 people to arrive. Comment on this method of conducting a survey. NOT a good method because: Everyone at the conference does not have an equal chance of responding to the survey	*9:29*
10. Evaluate $P = Q^2 - 2Q$ when Q = -3	*9:12* **9+6 =15**	20. Complete the sentence cos x = **4/5** 	*9:23*		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	