

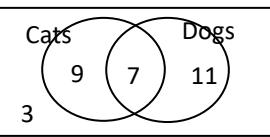
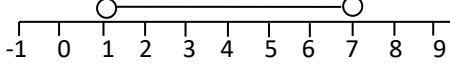
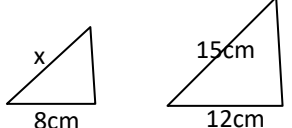
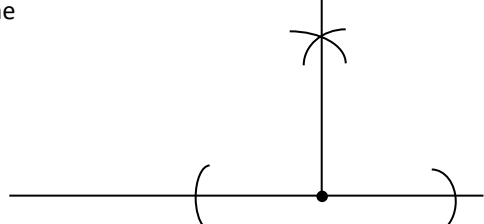
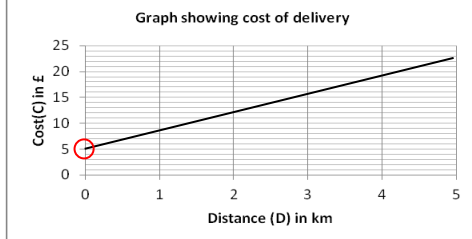
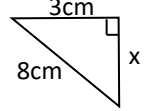
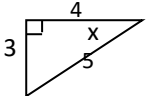
Maths Key Skills

Name:

Date:

Stage 9: Skill Check 9- Answers

Class/Group:

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Geometry & Measure, Statistics & Probability	
1. Which is bigger: 1.2×10^4 or 2.1×10^3	9:1 1.2×10^4	11. Work out the interest on £30 over 5 years at 5% simple interest	9:13 £7.50	21. 30 pupils in a class 18 have a dog 16 have a cat 3 have neither Complete the Venn diagram	9:27 
2. Which is bigger: 1.8×10^{-3} or 8.1×10^{-4}	9:1 1.8×10^{-3}	12. A stool increased by 50% to £120. Find its original price.	9:14 £80	22. Three coins are tossed. Work out the probability of tossing THREE HEADS	9:28 $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$ $= \frac{1}{8}$
3. 7 has been rounded to nearest whole Express the limits in the form $a \leq x < b$	9:2 $6.5 \leq x < 7.5$	13. Density 19.3g/cm^3 Volume = 100cm^3 What is the Mass?	9:15 1930g		
4. Factorise: $x^2 - 4$	9:4 $(x-2)(x+2)$	14. Complete the table for DIRECT proportion	9:16	HHH, HTH, HHT, HTT TTT, THT, TTH, THH	
5. If $1 < x < 7$, show the solution for x on the number line	9:5 	15. The two shapes are similar. Find x 	9:17 Sf=12÷8 =1.5 x=15÷1.5 =10cm		
6. Make 'x' the subject of the equation $3(x - 3) = y$	9:6 $x = \frac{1}{3}y + 3$	16. Work out the area of the semi-circle (to 3sf)	9:18 $\pi \times 1.5^2 \div 2$ = 3.53cm^2	23. Use the Venn diagram in Q21 to work out the probability that a person chosen has both a cat & a dog.	9:28 7/30
7. Solve the equation: $\frac{y}{2} + \frac{2y}{3} = 7$	9:7 $7y=42$ $y=6$	17. Work out the curved surface area of a cylinder with $d=5\text{m}$ & $h=11\text{m}$ (3sf)	9:20 $2\pi r \times h = 2.5 \times 11 = 173 \text{m}^2$	24. Construct the perpendicular to the point on the line	9:26 
8. Write down the equation of a line parallel to $y - 2x = 4$	9:8 $y - 2x = \pm c$ or $y = 2x \pm c$	18. What additional information is needed for SAS congruency?	9:21 DA = TQ	25. Matt did a survey on the street about views on the European Union by interviewing anybody who volunteered to speak to him. Do you think this would be an appropriate method of choosing your sample. Give a reason. YES or NO – circle your choice Reason: Voluntary response is susceptible to bias. Volunteers are usually people with strong opinions, especially negative ones.	
9. What is the significance of the circled point?	9:9 Initial charge of £5 	19.  Work out length 'x' (to 1dp)	9:22 $\sqrt{8^2 - 3^2}$ = 7.4cm		
10. Evaluate $8 - w^2$ when $w = -2$	9:12 8-4 =4	20. Complete the sentence $\sin x = \frac{3}{5}$	9:23 		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)		Y (10-19)	
				G (20-25)	

