

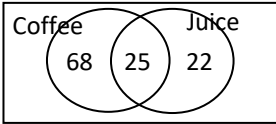
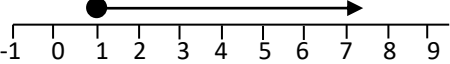
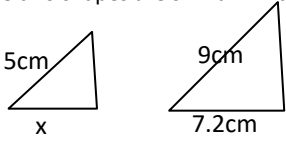
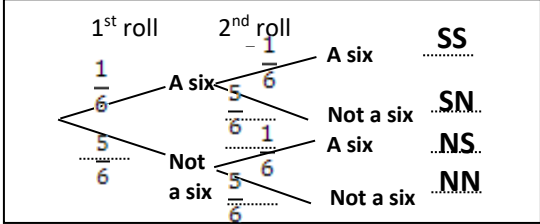
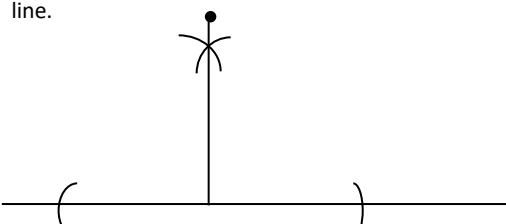
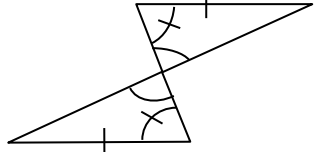
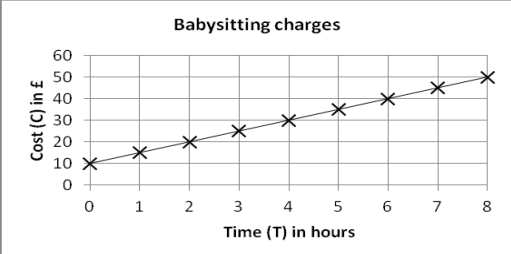
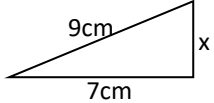
Maths Key Skills

Stage 9: Skill Check 14- Answers

Name:

Date:

Class/Group:

A: Number & Algebra		B: Proportion, Geometry & Measure		C: Statistics & Probability	
1. Write 1230 in standard form	9:1 1.23×10^3	11. Work out the balance on £2000 over 3 years at 11% compound interest	9:13 £2735.26	21. At a conference all had a drink 93 had coffee 47 had juice 25 had both Complete the Venn diagram & find how many were at the conference	9:27 115
2. Write 0.064 in standard form	9:1 6.4×10^{-2}	12. With a 10% reduction the builder's bill came to £387. What was the original bill?	9:14 £430		
3. 40 has been rounded to nearest whole Express the limits in the form $a \leq x < b$	9:2 $35 \leq x < 45$	13. Volume = 400cm^3 Mass 400g What is the Density?	9:15 $1\text{g}/\text{cm}^3$		
4. Solve: $x^2 - 17x + 70 = 0$	9:4 $x = 10$ or 7	14. A recipe uses 5 cups of flour to 2 cups of sugar. How much sugar would be needed for 8 cups of flour?	9:16 $3\frac{1}{3}$ cups	22. A dice is rolled twice. Complete the tree diagram.	9:28
5. If $5x - 7 \geq -2$, show the solution for x on the number line 	9:5	15. The two shapes are similar. Find x 	9:17 Sf=9÷5 =1.8 $x=7.2 \div 1.8$ =4cm		
6. Make 'y' the subject of the equation $2y + x = 2$	9:6 $y = 1 - \frac{1}{2}x$	16. Work out the PERIMETER of a quarter-circle with a radius of 8cm(2sf)	9:18 $\pi \times 16 \div 4 + 16$ =29cm	23. From the Tree diagram work out the probability of getting two sixes in two rolls of the dice.	9:28 $\frac{1}{36}$
7. Solve the equation: $\frac{y+1}{2} + \frac{y-3}{3} = 2$	9:7 $5y=15$ $y=3$	17. Work out the curved surface area of a cylinder with $d = 6\text{m}$ & $h = 3\text{m}$ (3sf)	9:20 $2\pi r \times h$ =56.5m²	24. Construct the perpendicular line from the point to the line. 	9:26
8. Is $x + y = 6$ parallel to $x - y = 6$?	9:8 NO	18. Give the condition of congruency 	9:21 AAS		
9. Write the equation of this line 	9:9 $C=10+5T$	19.  Work out length 'x' (to 1dp)	9:22 $\sqrt{9^2 - 7^2}$ =5.7cm	25. A telephone survey is conducted by choosing every 10 th person from the list. Give ONE disadvantage of this type of sampling technique. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">Everyone does not have an equal chance of being selected for the sample. It could lead to an under or over representation of a particular sector of the population</div>	9:29
10. Evaluate $2b^3 + b$ when $b = 3$	9:12 $54+3=57$	20. If $\cos 56^\circ = \frac{5}{x}$, work out x (2sf)	9:2 $35 \div \cos 56$ =8.9cm	The graph shows that there is an increase in consumption of fuel is in the months between October and March.	
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)		G (20-25)