| Maths Key Skills <br> Name: $\qquad$ | Date: .............................. |  |  | Stage 9: Skill Check 14 <br> Class/Group: $\qquad$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A: Number \& Algebra |  | B: Proportion, Geometry \& Measure |  | C: Geometry \& Measures, Statistics \& Probability |  |  |  |
| 1. Write $\mathbf{1 2 3 0}$ in standard form | 9:1 | 11. Work out the balance on $£ 2000$ over 3 years at $11 \%$ compound interest | 9:13 | 21. At a conference all had a drink <br> 93 had coffee <br> 47 had juice <br> 25 had both <br> Complete the Venn diagram <br> \& find how many were at the conference |  |  | 9:27 |
| 2. Write $\mathbf{0 . 0 6 4}$ in standard form | 9:1 | 12. With a $10 \%$ reduction the builder's bill came to $£ 387$. What was the original bill? | 9:14 |  |  |  |  |
| 3. 40 has been rounded to nearest whole Express the limits in the form $\mathrm{a} \leq \mathrm{x}<\mathrm{b}$ | $\begin{aligned} & 9: 2 \\ & \leq x< \end{aligned}$ | $\text { 13. Volume }=400 \mathrm{~cm}^{3} \text { Mass } 400 \mathrm{~g}$ What is the Density? | 9:15 |  |  |  |  |
| 4. Solve: $\mathrm{x}^{2}-17 x+70=0$ | 9:4 | 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 | 22. A dice is rolled twice. Complete the tree diagram. |  |  |  |
| 5. If $\mathbf{5 x - 7} \geq-\mathbf{2}$, show the solution for $\mathbf{x}$ on the number line |  | 15. The two shapes are similar. Find $x$ | 9:17 |  |  |  |  |
| 6. Make ' $y$ ' the subject of the equation $2 y+x=2$ | 9:6 | 16. Work out the PERIMETER of a quartercircle with a radius of 8 cm (2sf) | 9:18 | 23. From the Tree diagram work out the probability of getting two sixes in two rolls of the dice. |  |  | 9:28 |
| 7. Solve the equation: $\frac{y+1}{2}+\frac{y-3}{3}=2$ | 9:7 | 17. Work out the curved surface area of a cylinder with $\mathrm{d}=6 \mathrm{~m} \& \mathrm{~h}=3 \mathrm{~m}$ (3sf) | 9:20 | 24. Construct the perpendicular line from the point to the line. |  |  |  |
| 8. Is $x+y=6$ parallel to $x-y=6$ ? | 9:8 | 18. Give the condition of congruency | 9:21 |  |  |  |  |
| 9. Write the equation of this line | 9:9 | 19. <br> Work out length ' $x$ ' (to 1 dp ) | 9:22 | 25. A telephone survey is conducted by choosing every $10^{\text {th }}$ person from the list. Give ONE disadvantage of this type of sampling technique.$\qquad$$\qquad$$\qquad$ |  |  |  |
| Babsitting charges |  |  |  |  |  |  |  |
| 10. Evaluate $\mathbf{2 b}^{\mathbf{3}} \mathbf{+} \mathbf{b}$ when $\mathbf{b}=\mathbf{3}$ | 9:12 | 20. If $\cos 56^{\circ} \frac{5}{x}$, work out $x$ (2sf) | 9:23 |  |  |  |  |
| Total (A) |  | Total (B) |  |  | Tot |  |  |
| Test Total ( $\mathrm{A}+\mathrm{B}+\mathrm{C}$ ) |  | R (0-9) |  |  |  | G (20-25) |  |

