| A1 | Non Calculator Paper |  |
| :---: | :---: | :---: |
| 1 | Evaluate $2 \frac{1}{3}+\frac{5}{6}$. <br> Give your answer in the simplest form. | 2 |
| 2 | Expand and simplify $(x-4)\left(x^{2}-5 x+3\right)$ | 3 |
| 3 | Given that $f(x)=x^{2}-5$, evaluate $f(-2)$ | 2 |
| 4 | Express $x^{2}-10 x+32$ in the form $(x+p)^{2}+q$ | 2 |
| 5 | Solve, algebraically, the system of equations $\begin{aligned} & 4 x+5 y=19 \\ & 3 x-2 y=-3 \end{aligned}$ | 3 |
| 6 | The diagram below shows a circle with a centre 0 . <br> $A C$ is a tangent to the circle at point B. <br> $E D$ is a diameter of the circle. <br> Angle BEO is $42^{\circ}$ <br> Calculate the size of angle BCD. | 3 |
| 7 | (a) Express $r^{-3}$ with a positive power. <br> (b) Hence or otherwise express $\frac{1}{5 r^{-3}}$ with a positive power. | 1 |
| 8 | The diagram shows a cone with a diameter of 6 centimetres and a height of 10 centimetres. <br> Calculate the volume of the cone. <br> Take $\boldsymbol{\pi}=\mathbf{3 . 1 4}$ | 2 |
| 9 | Simplify $\sqrt{20}+\sqrt{125}-\sqrt{5}$ | 3 |


| 10 | The diagram shows part of a parabola with <br> an equation in the form $y=(x+5)^{2}$. |  |  |
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|  | Find:  <br> (i) The coordinates of point A <br> (ii) The coordinates of point B <br> (iii)  <br> The equation of the axis of  <br> symmetry.  |  |  |

