| 1 | Rotation of $90^{\circ}$ clockwise about the origin |
| :---: | :---: |
| 2 | Enlargement of scale factor 2 about the origin |
| 3 | Reflection in the $x$-axis |
| 4 | Reflection in the line $y=x$ |
| 5 | Rotation of $90^{\circ}$ anti-clockwise about the origin |
| 6 | Enlargement of scale factor 3 about the origin |
| 7 | Reflection in the $y$-axis |
| 8 | Rotation of $180^{\circ}$ about the origin |
| 9 | Enlargement of scale factor 2 about the origin, followed by a reflection in the $y$-axis |
| 10 | Reflection in the line $y=-x$ |
| 11 | Rotation of $90^{\circ}$ clockwise about the origin, followed by an enlargement of scale factor 2 |
| 12 | Enlargement of scale factor 3, followed by a reflection in the $x$-axis |


| A | $\left(\begin{array}{cc}0 & -1 \\ -1 & 0\end{array}\right)$ |
| :---: | :---: |
| B | $\left(\begin{array}{cc}-1 & 0 \\ 0 & -1\end{array}\right)$ |
| C | $\left(\begin{array}{cc}3 & 0 \\ 0 & 3\end{array}\right)$ |
| D | $\left(\begin{array}{cc}-1 & 0 \\ 0 & 1\end{array}\right)$ |
| E | $\left(\begin{array}{cc}2 & 0 \\ 0 & 2\end{array}\right)$ |
| F | $\left(\begin{array}{cc}0 & 1 \\ -1 & 0\end{array}\right)$ |
| $\mathbf{G}$ | $\left(\begin{array}{cc}3 & 0 \\ 0 & -3\end{array}\right)$ |
| H | $\left(\begin{array}{cc}1 & 0 \\ 0 & -1\end{array}\right)$ |
| $\mathbf{I}$ | $\left(\begin{array}{cc}0 & 2 \\ -2 & 0\end{array}\right)$ |
| J | $\left(\begin{array}{cc}0 & -1 \\ 1 & 0\end{array}\right)$ |
| K | $\left(\begin{array}{cc}-2 & 0 \\ 0 & 2\end{array}\right)$ |
| $\mathbf{L}$ | $\left(\begin{array}{cc}0 & 1 \\ 1 & 0\end{array}\right)$ |


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |

