Match-Up

**Matrix Transformations**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1** | Rotation of $90°$ clockwise about the origin |  | **A** | $$\left(\begin{matrix}0&-1\\-1&0\end{matrix}\right)$$ |
| **2** | Enlargement of scale factor $2$ about the origin |  | **B** | $$\left(\begin{matrix}-1&0\\0&-1\end{matrix}\right)$$ |
| **3** | Reflection in the $x$-axis |  | **C** | $$\left(\begin{matrix}3&0\\0&3\end{matrix}\right)$$ |
| **4** | Reflection in the line $y=x$ |  | **D** | $$\left(\begin{matrix}-1&0\\0&1\end{matrix}\right)$$ |
| **5** | Rotation of $90°$ anti-clockwise about the origin |  | **E** | $$\left(\begin{matrix}2&0\\0&2\end{matrix}\right)$$ |
| **6** | Enlargement of scale factor $3$ about the origin |  | **F** | $$\left(\begin{matrix}0&1\\-1&0\end{matrix}\right)$$ |
| **7** | Reflection in the $y$-axis |  | **G** | $$\left(\begin{matrix}3&0\\0&-3\end{matrix}\right)$$ |
| **8** | Rotation of $180°$ about the origin |  | **H** | $$\left(\begin{matrix}1&0\\0&-1\end{matrix}\right)$$ |
| **9** | Enlargement of scale factor $2$ about the origin, followed by a reflection in the $y$-axis |  | **I** | $$\left(\begin{matrix}0&2\\-2&0\end{matrix}\right)$$ |
| **10** | Reflection in the line $y=-x$ |  | **J** | $$\left(\begin{matrix}0&-1\\1&0\end{matrix}\right)$$ |
| **11** | Rotation of 9$0°$ clockwise about the origin, followed by an enlargement of scale factor $2$  |  | **K** | $$\left(\begin{matrix}-2&0\\0&2\end{matrix}\right)$$ |
| **12** | Enlargement of scale factor $3$, followed by a reflection in the $x$-axis |  | **L** | $$\left(\begin{matrix}0&1\\1&0\end{matrix}\right)$$ |

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