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| Match-Up | Rotation Matrices |
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|           |                                                                                                                     |          |                                                     |
|-----------|---------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------|
| <b>1</b>  | $\begin{pmatrix} \frac{1}{2} & \frac{\sqrt{3}}{2} \\ -\frac{\sqrt{3}}{2} & \frac{1}{2} \end{pmatrix}$               | <b>A</b> | Rotation 90° anti-clockwise about (0, 0)            |
| <b>2</b>  | $\begin{pmatrix} \frac{\sqrt{2}}{2} & \frac{\sqrt{2}}{2} \\ -\frac{\sqrt{2}}{2} & \frac{\sqrt{2}}{2} \end{pmatrix}$ | <b>B</b> | Rotation 45° anti-clockwise about (0, 0)            |
| <b>3</b>  | $\begin{pmatrix} \frac{\sqrt{2}}{2} & \frac{\sqrt{2}}{2} \\ -\frac{\sqrt{2}}{2} & \frac{\sqrt{2}}{2} \end{pmatrix}$ | <b>C</b> | Rotation 180° about the origin                      |
| <b>4</b>  | $\begin{pmatrix} \frac{1}{2} & -\frac{\sqrt{3}}{2} \\ \frac{\sqrt{3}}{2} & \frac{1}{2} \end{pmatrix}$               | <b>D</b> | Rotation 120° anti-clockwise about (0, 0)           |
| <b>5</b>  | $\begin{pmatrix} \frac{\sqrt{2}}{2} & -\frac{\sqrt{2}}{2} \\ \frac{\sqrt{2}}{2} & \frac{\sqrt{2}}{2} \end{pmatrix}$ | <b>E</b> | Rotation 300° clockwise about (0, 0)                |
| <b>6</b>  | $\begin{pmatrix} 0 & -1 \\ 1 & 0 \end{pmatrix}$                                                                     | <b>F</b> | Rotation $\theta^\circ$ anti-clockwise about (0, 0) |
| <b>7</b>  | $\begin{pmatrix} -\frac{\sqrt{3}}{2} & \frac{1}{2} \\ \frac{1}{2} & -\frac{\sqrt{3}}{2} \end{pmatrix}$              | <b>G</b> | Rotation 135° anti-clockwise about (0, 0)           |
| <b>8</b>  | $\begin{pmatrix} -1 & 0 \\ 0 & -1 \end{pmatrix}$                                                                    | <b>H</b> | Rotation 90° clockwise about the origin             |
| <b>9</b>  | $\begin{pmatrix} 0 & 1 \\ -1 & 0 \end{pmatrix}$                                                                     | <b>I</b> | Rotation 210° anti-clockwise about (0, 0)           |
| <b>10</b> | $\begin{pmatrix} \cos \theta & -\sin \theta \\ \sin \theta & \cos \theta \end{pmatrix}$                             | <b>J</b> | Rotation 45° clockwise about the origin             |

[illegible]