Linear Transformations in 3D



Reflections



Rotations



Test Your Understanding

$$M=\left(\begin{matrix}\frac{\sqrt{3}}{2}&0&\frac{1}{2}\\0&1&0\\-\frac{1}{2}&0&\frac{\sqrt{3}}{2}\end{matrix}\right)$$

(a) Describe the transformation represented by $M$.

(b) Find the image of the point with coordinates $\left(-1,-2,1\right)$ under the transformation represented by $M$.

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