## Exercise 10

Sketch the vector field $\mathbf{F}$ by drawing a diagram like Figure 5 or Figure 9.

$$
\mathbf{F}(x, y, z)=\mathbf{i}+\mathbf{k}
$$

## Solution

Below is a plot of the vector field in $x y z$-space. The length and hue of each vector indicate its magnitude.


