

Each problem is worth 5 points. Clear and complete justification is required for full credit.

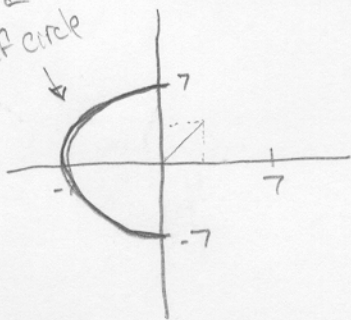
1. Give parametric equations $x(t)$, $y(t)$, $z(t)$ and bounds for t that produce a path from $(0, -3, 1)$ to $(5, 7, -2)$.

$$\begin{aligned} x &= 0 + 5t &= \underline{5t} \\ y &= -3 + 10t &= \underline{-3 + 10t} \\ z &= 1 - 3t &= \underline{1 - 3t} \end{aligned}$$

$$\underline{0 \leq t \leq 1}$$

Good

2. Give parametric equations $x(t)$, $y(t)$ and bounds for t that produce the left half of a circle, oriented counterclockwise, with radius 7 centered at the origin.



$$\begin{aligned} x &= \underline{7 \cos t} \\ y &= \underline{7 \sin t} \end{aligned}$$

$$\underline{\frac{\pi}{2} \leq t \leq \frac{3\pi}{2}}$$

Great