1. Give parametric equations $x(t)$, $y(t)$, $z(t)$ and bounds for $t$ that produce a path from $(7, 7, -4)$ to $(5, 7, 1)$.

\[ x(t) = 7 + (5 - 7)t = 7 - 2t \]
\[ y(t) = 7 - 0t = 7 \]
\[ z(t) = -4 + (1 - (-4))t = -4 + 5t \]

for $0 \leq t \leq 1$

Excellent!

2. Give parametric equations $x(t)$, $y(t)$, $z(t)$ and bounds for $t$ that produce the portion of a unit circle centered at $(0, 0, 2)$ in the plane $z = 2$ beginning at $(1, 0, 2)$ and ending at $(0, 1, 2)$.

\[ x(t) = \cos t \]
\[ y(t) = \sin t \]
\[ z(t) = 2 \]

$0 \leq t \leq \frac{\pi}{2}$

Nice!