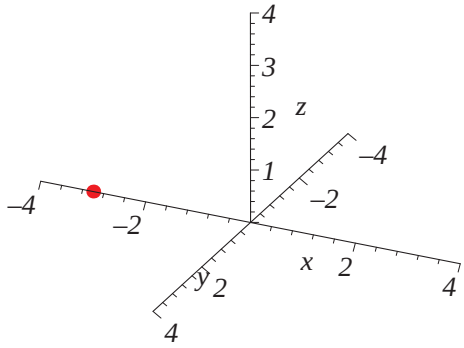
(a) $x = \rho \sin\phi \cos\theta = (3)\sin(\frac{\pi}{2})\cos(\frac{3\pi}{2}) = 0$,
$y = \rho \sin\phi \sin\theta = (3)\sin(\frac{\pi}{2})\sin(\frac{3\pi}{2}) = -3$,
$z = \rho \cos\phi = (3)\cos(\frac{\pi}{2}) = 0$ so the point is
$(0, -3, 0)$ in rectangular coordinates.



(b) $x = \rho \sin\phi \cos\theta = (4)\sin(\frac{\pi}{3})\cos(\frac{5\pi}{4}) = -\sqrt{6}$,
$y = \rho \sin\phi \sin\theta = (4)\sin(\frac{\pi}{3})\sin(\frac{5\pi}{4}) = -\sqrt{6}$,
$z = \rho \cos\phi = (4)\cos(\frac{\pi}{3}) = 2$ so the point is
$\left(-\sqrt{6}, -\sqrt{6}, 2\right)$ in rectangular coordinates.