12.8 Cylindrical and Spherical Coordinates Ex 4: $(8, \frac{5\pi}{6}, \frac{\pi}{3}) = (\rho, \phi, \phi)$ 10 1 1. brutzin . 6. 214 22 214 1/3 . 6. 15 . 5. 12 . 5/2 5= 6 co) \$ - 8. co) = - 8. (- 13) = - 412 (-3,-4,-12) in red. coord. b= X++1,+5, 2, +10+1111.100 2) b- 13 X3+1,: (, = (.2 $\sin \phi = \frac{13}{c} = \frac{1$ tan (Θ-π): -4 Θ-π+tan' 4/ EK? 5- Ks+ 1, => 5- 65 => b cas p = b, zin, p => cas p - b zin, p => b zin p zin p = crc b cat p p = csc & cot & 0 < & = 1/2 EXP b = 50010 => b5 = 5 6000 => X3+13+55 = 25 => X1+15+(5-1),=1