For each conic below:

[1]   Classify the type of the conic.
[2]   Find the rectangular equation of the directrix.
[3]   Find the center and all foci in either polar or rectangular coordinates.
[4]   Sketch the latera recta (plural of latus rectum).
[5]   Sketch the conic.

[a] $r = \dfrac{12}{4 - 3\sin\theta}$
[b] $r = \dfrac{6}{3 + 2\cos\theta}$