Math 221: Some polar problems

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1. Identify the polar curve with its polar equation.

$(a)\quad r = 3/2$ $\quad(b)\quad r = \cos(\theta) + \frac{3}{2}\sin(2\theta)$ $\quad(c)\quad r = 2\sin(\theta)$

$(d)\quad r = e^{\theta}$ $\quad(e)\quad r = 1 + 3\sin(3\theta)$ $\quad(f)\quad r = 2\sin(2\theta)$

$(g)\quad r = tan(\theta)$ $\quad(h)\quad r = (\cos(\theta) + \frac{3}{2}\sin(4\theta))$ $\quad(i)\quad r = \cos(\theta) - 1$

I

II

III

IV

V

VI

VII

VIII

IX