

C. The simultaneous equations in x, y ,

$$(\cos \theta) x - (\sin \theta) y = 2$$

$$(\sin \theta) x + (\cos \theta) y = 1$$

are solvable

- (a) for all values of θ in the range $0 \leq \theta < 2\pi$;
- (b) except for one value of θ in the range $0 \leq \theta < 2\pi$;
- (c) except for two values of θ in the range $0 \leq \theta < 2\pi$;
- (d) except for three values of θ in the range $0 \leq \theta < 2\pi$.