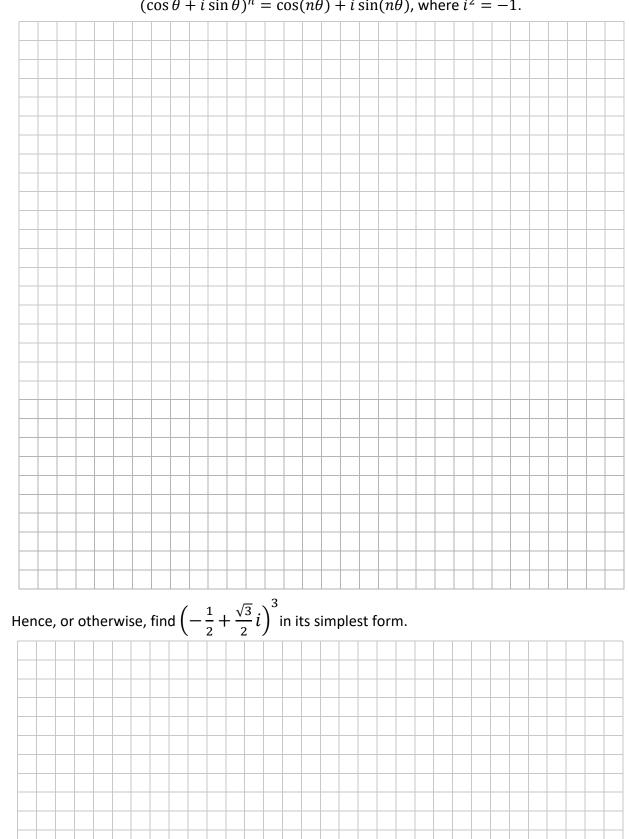
## **Question 4**





 $(\cos \theta + i \sin \theta)^n = \cos(n\theta) + i \sin(n\theta)$ , where  $i^2 = -1$ .

(b)